GigaDevice

2026

PRODUCT SELECTION GUIDE

Contents

About Us 02

Flash

SPI NOR Flash 03
SPI NAND Flash 12
Parallel NAND Flash 14
Flash Package Options 16

GD32 MCU

GD32 MCU Family 17
High-Performanc MCU 18
Main-Stream MCU 26
Entry-Level MCU 31
Low-Power Consumption MCU 35
Wireless MCU 36
Automotive MCU 37
GD32 MCU Package Options 40
GD32 Development Ecosystem 40

Analog

General Power IC 42
ASSP Power IC 44
Battery Management IC 45
Motor Driver 47
Signal Chain 48
Capacitor Sensitivity 54

Sensor

Capacitive Touch Controllers 55
Fingerprint Sensors 56
Barometric Pressure Sensors 57

2026

About GigaDevice

GigaDevice Semiconductor Inc. is a global leading fabless supplier. Founded in April 2005, the company has continuously expanded its international presence and established its global headquarters in Singapore in 2025, with branches across multiple countries and regions. Centered on its core product lines including memory, MCU, sensor, and analog products, GigaDevice can provide a wide range of solutions and services in the fields of industrial, automotive, computing, consumer electronics, IoT, mobile, networking and communications. In a constant quest to expand our technology offering to customers, GigaDevice has also formed strategic alliances with leading foundries, assembly, and test plants to streamline supply chain management. For more details, please visit: www.gigadevice.com

2005
Established

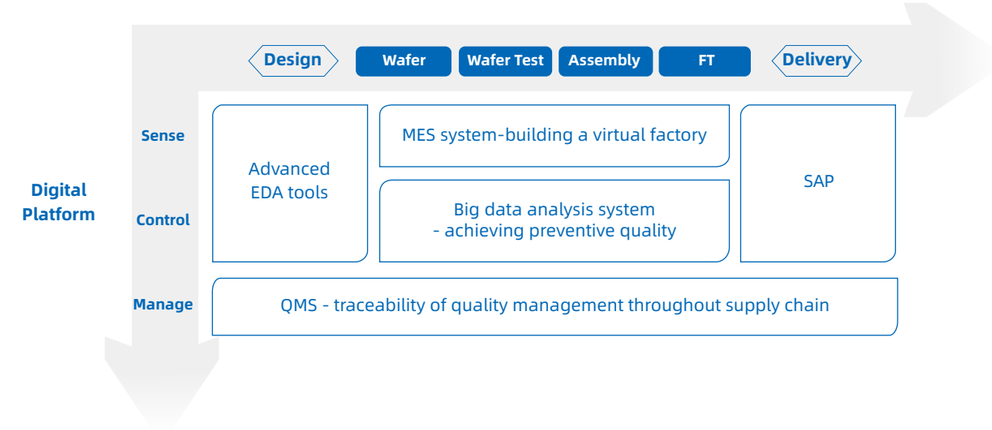
1154
Patents Granted

20,000+
Customers

TOP2
Global
SPI NOR Flash

TOP7
Global 32-bit
General Purpose MCU

End-to-End Quality Control



Our Certificates

ISO 26262 ASIL D
Functional Safety Development Process Certificate

ISO 26262 ASIL B
Functional Safety Product Certificate

ISO 26262 ASIL D
Functional Safety Certificate

ISO/SAE 21434
Road Vehicles Cybersecurity Engineering Certificate

TISAX® AL3
Certificate

IEC 61508 SC3 (SIL2/SIL3)
Functional Safety Certificate

IEC/UL 60730 ClassB
Functional Safety Certificate

CNAS ISO/IEC 17025
Laboratory Accreditation Certificate

ISO 9001
Quality Management System Certificate

ISO 14001
Environmental Management System Certificate

ISO 45001
Occupational Health and Safety Management System Certificate

D-U-N-S Registered Company

SPI NOR Flash

SPI NOR Flash Features

3V	1.8V	1.65V-3.6V	1.8V VCC &1.2V VIO	1.2V
Single Power Supply Voltage • Voltage range:2.7V~3.6V **High Speed Clock Frequency** • Maximum 200MHz for fast read* • Dual I/O Data transfer up to 332Mbit/s • Quad I/O Data transfer up to 664Mbit/s • Octal I/O Data transfer up to 1600Mbit/s • DTR Quad I/O Data transfer up to 1600Mbit/s • DTR Octal I/O Data transfer up to 3200Mbit/s • Continuous read with 8/16/32/64-Byte wrap **Flexible Memory Architecture** • Sector size: 4K-Byte • Block size: 32/64K-Byte	**Single Power Supply Voltage** • Voltage range: 1.65V~2.0V **High Speed Clock Frequency** • Maximum 200MHz for fast read* • Dual I/O Data transfer up to 332Mbit/s • Quad I/O Data transfer up to 664Mbit/s • QPI Data transfer up to 664Mbit/s • Octal I/O Data transfer up to 1600Mbit/s • DTR Quad I/O Data transfer up to 1600Mbit/s • DTR Octal I/O Data transfer up to 3200Mbit/s • Continuous read with 8/16/32/64-Byte wrap **Flexible Memory Architecture** • Sector size: 4K-Byte • Block size: 32/64K-Byte	**Single Power Supply Voltage** • Voltage range: 1.65V~3.6V **High Speed Clock Frequency** • Maximum 104MHz for fast read* • Dual I/O Data transfer up to 208Mbit/s • Quad I/O Data transfer up to 416Mbit/s • Continuous read with 8/16/32/64-Byte wrap **Flexible Memory Architecture** • Sector size: 4K-Byte • Block size: 32/64K-Byte	**Dual Power Supply Voltage** • Core Voltage Range:1.65V~2.0V • IO Voltage Range: 1.10V~1.30V **High Speed Clock Frequency** • Maximum 200MHz for fast read* • Dual I/O Data transfer up to 332Mbit/s • Quad I/O Data transfer up to 664Mbit/s • QPI Data transfer up to 664Mbit/s • Octal I/O Data transfer up to 1600Mbit/s • DTR Quad I/O Data transfer up to 832Mbit/s • DTR Octal I/O Data transfer up to 3200Mbit/s • Continuous read with 8/16/32/64-Byte wrap **Flexible Memory Architecture** • Sector size: 4K-Byte • Block size: 32/64K-Byte	**Single Power Supply Voltage** • Voltage range: 1.14V~1.26V **High Speed Clock Frequency** • Maximum 120MHz for fast read* • Dual I/O Data transfer up to 240Mbit/s • Quad I/O Data transfer up to 480Mbit/s • QPI Data transfer up to 480Mbit/s • DTR Quad I/O Data transfer up to 640Mbit/s • Continuous read with 8/16/32/64-Byte wrap **Flexible Memory Architecture** • Sector size: 4K-Byte • Block size: 32/64K-Byte

* This feature is supported by part of family

SPI NOR Flash Part Number Definition

GD | 25 | Q | 64 | H | S | I | G | Y

Company Prefix
GD: GigaDevice

Product Family
25/55: SPI Interface Flash

Series
D: 3V, Dual Output
Q: 3V, Quad I/O
B: 3V, Quad I/O, Default x4 I/O
F: 3V, Quad I/O, Default x4 I/O, High Performance
T: 3V, Quad I/O, Default x4 I/O, Ultra-High Performance
R: 3V, Quad I/O, Stack RPMC
X: 3V, Octal I/O, Ultra-High Performance
LD: 1.8V, Dual Output
LQ: 1.8V,Quad I/O
LB: 1.8V, Quad I/O, Default x4 I/O
LE: 1.8V,Quad I/O, Low Power
LF: 1.8V,Quad I/O, Default x4 I/O, High Performance
LT: 1.8V,Quad I/O, Default x4 I/O, Ultra-High Performance
LR: 1.8V,Quad I/O, Stack RPMC
LX: 1.8V,Octal I/O ,Ultra-High Performance
WD: 1.65~3.6V,Dual Output
WQ: 1.65~3.6V,Quad I/O
WB: 1.65~3.6V,Quad I/O, Default x4 I/O
NE: 1.8V VCC,1.2V VIO, Quad I/O, Low Power
NF: 1.8V VCC,1.2V VIO, Quad I/O, Default x4 I/O, High Performance
NX: 1.8V VCC,1.2V VIO, Octal I/O, Ultra-High Performance,
UF: 1.2V, Quad I/O, Default x4 I/O

Density
05: 512Kb
10: 1Mb
20: 2Mb
40: 4Mb
80: 8Mb
16: 16Mb
32: 32Mb
64: 64Mb
128: 128Mb
256: 256Mb
512M: 512Mb
01G: 1Gb
02G: 2Gb

Version
E:E Version
F: F Version
H: H Version
J: J Version
L: L Version
M: M Version

Package Type
F: SOP16 300mil
S: SOP8 208mil
T: SOP8 150mil
L: WLCSP (4-4 ball array)
L6: WLCSP (2x3 ball array)
3: WLCSP (3-2-3 ball array)
4: WLCSP (4x6 ball array)
XE: FO-USON8 3x2mm
XH: FO-USON8 3x3mm
K6: USON6 1.2x1.2mm
K: USON8 1.5x1.5mm
E: USON8 3x2mm
N: USON8 3x4mm
Q: USON8 4x4mm
W: WSON8 6x5mm
Y: WSON8 8x6mm
B: TFBGA-24ball 6x8mm(5x5 ball array)
E4: USON8 3x2x0.4mm

Temperature Range
I: Industrial (-40℃ ~ 85℃) | A: Automotive (-40℃ ~ 125℃)
J: Industrial (-40℃ ~105℃) | 2: Automotive (-40℃ ~ 105℃)
E: Industrial (-40℃ ~125℃)

Special Options
G:Pb Free + Halogen Free Green Package
R:Pb Free + Halogen Free Green Package + Reset# pin

Packing Type
T: Tube | R: Tape&Reel | Y: Tray

SPI NOR Flash Features

Flash Voltage	3V							1.8V								1.65V-3.6V			1.8V VCC, 1.2V VIO			1.2V
Family	D	Q	B	F	T	R	X	LD	LQ	LB	LE	LF	LT	LR	LX	WD	WQ	WB	NE	NF	NX	UF
Part No.	xxE	xxE xxH xxM	xxE xxF xxH	xxF	xxE	xxE xxF	xxE	xxE	xxE xxH	xxE xxF xxH	xxE xxH xxL	xxE xxF xxJ	xxE xxJ	xxE xxF	xxE xxJ	xxE	xxE xxH xxM	xxE xxH	xxH	xxF xxJ	xxJ	xxE
Single I/O (1-1-1)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dual Output (1-1-2)	•	•	*	•		*		•	•	*	•	•		*		•	•	•	•	•		•
Dual I/O (1-2-2)		•	*	•		*			•	*	•	•		*			•	•	•	•		•
Quad Output (1-1-4)		•	•	•	•	•			•	•	•	•	•	•			•	•	•	•		•
Quad I/O (1-4-4)		•	•	•	•	•			•	•	•	•	•	•			•	•	•	•		•
Octal Output (1-1-8)							•								•						•	
Octal I/O (1-8-8)							•								•						•	
QPI (4-4-4)			*		•				•	•	•	•	•						•	•		•
OPI (8-8-8)							•								•						•	
DTR		*	*	•	•		•			*	*	•	•		•				•	•	•	•
H/W Reset (RESET# Pin)		*	*	•	•	*	•		*	*	*	*	•	*	•		*	*	•	•	•	*
S/W Reset		•	•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•
H/W Write Protection (WP# Pin)	•	•	*	*	•	*	•	•	•	*	•		•	*	•	•	•	•	•	•	•	
S/W Write Protection	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Volatile & Non-volatile Status Register Bit		•	•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•
Output Driver Strength		*	*	•	•	*	•		*	*	*	*	•	*	•		*	*	•	•	•	*
Security Registers with OTP Locks	*	•	•	•	•	•	•	*	•	•	•	•	•	•	•	*	•	•	•	•	•	•
SFDP Register		•	•	•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•
ECC				•	•		•					*	•		•					•	•	

* This feature is supported by part of family

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25D05E	512Kb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25D10E	1Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25D20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25Q20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil SOP8 208mil
GD25D40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25Q40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil SOP8 208mil
GD25B80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP8 150mil
GD25D80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25Q80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25Q16M	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	USON8 1.5x1.5mm USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil
GD25B16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil
GD25Q16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25B32H	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25Q32H	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25B32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25Q32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25B64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm
GD25B64H	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25F64F	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25Q64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25Q64H	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25R64E	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25B128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25B128H	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD55F256F	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil
GD25F128F	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25Q128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25Q128H	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25R128E	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25B256H	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25Q256H	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25B256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F256F	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25Q256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25R256E	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm
GD25B512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25R512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm
GD25T512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25X512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55B01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55F01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55T01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55B02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55T02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LD05E	512Kb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LD10E	1Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LD20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LQ20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LD40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LE40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LQ40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LD80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual Output	50MHz(x1) 40MHz(x2)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25LE80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) USON8 3x2mm SOP8 150mil
GD25LQ80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LB16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LE16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (3-2-3 ball array) USON8 3x2mm
GD25LQ16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LB32H	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm USON8 3x4mm
GD25LE32H	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (3-2-3 ball array) USON8 3x2mm USON8 3x4mm
GD25LQ32H	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LB32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 208mil WSON8 6x5mm
GD25LE32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) WLCSP (3-2-3 ball array) USON8 3x2mm USON8 3x4mm USON8 4x4mm
GD25LQ32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LR32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 150mil SOP8 208mil WSON8 6x5mm

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25LB64H	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm USON8 4x4mm SOP8 208mil WSON8 6x5mm
GD25LE64H	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) USON8 3x4mm USON8 4x4mm
GD25LQ64H	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LB64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LE64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil
GD25LQ64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LR64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm
GD25LT64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	200MHz(x1, x4) 200MHz(DTR)	USON8 4x4mm SOP8 208mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25LX64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	WLCSP (4x6 ball array) TFBGA24 8x6mm (5x5 ball array)
GD25LB128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LE128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LQ128H	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 150mil SOP8 208mil SOP16 300mil WSON8 6x5mm
GD25LB128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LE128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) FO-USON8 3x3mm USON8 4x4mm SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25LF128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LQ128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LR128E	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25LX128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	WLCSP (4x6 ball array) TFBGA24 8x6mm (5x5 ball array)
GD55LE256L	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm SOP8 150mil
GD25LB256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LE256H	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	WLCSP (4-4 ball array) WSON8 6x5mm
GD25LF256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LQ256H	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25LR256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LX256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	WLCSP (4x6 ball array) SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LE512ML	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil WSON8 6x5mm
GD25LB512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LF512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LR512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LX512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD55LB01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LF01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LR01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LT01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LB02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LF02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LT02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25WD05E	512Kb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25WD10E	1Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25WD20E	2Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25WQ20E	2Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil
GD25WD40E	4Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON6 1.2x1.2mm USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25WQ40E	4Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	WLCSP (2x3 ball array) USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil
GD25WD80E	8Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual Output	104MHz(x1) 80MHz(x2)	USON8 1.5x1.5mm USON8 3x2mm SOP8 150mil SOP8 208mil
GD25WQ80E	8Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil SOP8 208mil
GD25WQ16M	16Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 66MHz(DTR)	USON8 1.5x1.5mm USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25WQ16E	16Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	WLCSP (3-2-3 ball array) USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25WQ32H	32Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 80MHz(DTR)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25WQ32E	32Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25WQ64E	64Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25WQ64H	64Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 66MHz(DTR)	WLCSP (4-4 ball array) FO-USON8 3x2mm USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25WQ128E	128Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25WQ128H	128Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 66MHz(DTR)	WLCSP (4-4 ball array) USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25WB256H	256Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4) 66MHz(DTR)	USON8 4x4mm SOP8 208mil WSON8 6x5mm WSON8 8x6mm
GD25WB256E	256Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25NE32H	32Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NE64H	64Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NX64J	64Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NE128H	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)

Industrial-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Organization	I/O Bus	Frequency (MHz)	Packages
GD25NF128J	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NX128J	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NF256F	256Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NE256H	256Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NF512MF	512Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55NF01GF	1Gb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55NF02GF	2Gb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25UF80E	8Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	WLCSP (4-4 ball array) USON8 3x2mm SOP8 150mil SOP8 208mil
GD25UF16E	16Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	WLCSP (3-2-3 ball array) USON8 3x2mm SOP8 150mil SOP8 208mil
GD25UF32E	32Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	USON8 3x2mm SOP8 150mil SOP8 208mil
GD25UF64E	64Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	WLCSP (4-4 ball array) USON8 3x4mm USON8 4x4mm SOP8 208mil
GD25UF128E	128Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	USON8 4x4mm SOP8 208mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25UF256E	256Mb	1.14V-1.26V	4KB / 32KB / 64KB	Single / Dual / Quad	120MHz(x1, x2, x4) 80MHz(DTR)	WLCSP (4-4 ball array) SOP8 208mil SOP16 300mil WSON8 6x5mm

Product Series

3V	D: Dual Output Q: Quad I/O B: Quad I/O, Default x4 I/O F: Quad I/O, Default x4 I/O, High Performance, ECC T: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC R: Quad I/O, Stack RPMC X: Octal I/O, Ultra-High Performance, ECC	1.8V	LD: Dual Output LQ: Quad I/O LB: Quad I/O, Default x4 I/O LE: Quad I/O, Low Power LF: Quad I/O, Default x4 I/O, High Performance, ECC* LT: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC LR: Quad I/O, Stack RPMC LX: Octal I/O, Ultra-High Performance, ECC	1.65V~3.6V	WD: Dual Output WQ: Quad I/O WB: Quad I/O, Default x4 I/O	1.8V VCC, 1.2V VIO	NE: 1.2V VIO, Quad I/O, Low Power NF: 1.2V VIO, Quad I/O, Default x4 I/O, High Performance, ECC NX: 1.2V VIO, Octal I/O, Ultra-High Performance, ECC	1.2V	UF: Quad I/O, Default x4 I/O	

* Supported only by versions F and J

Automotive-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Oragnization	I/O Bus	Frequency (MHz)	Packages
GD25Q20E	2Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25Q40E	4Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil
GD25Q80E	8Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil SOP8 208mil
GD25B16E	16Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25B32E	32Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25F64F	64Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil SOP16 300mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25F128F	128Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP8 208mil SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F256F	256Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25F512MF	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25T512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25X512ME	512Mb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F01GF	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55T01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X01GE	1Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55F02GF	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55T02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55X02GE	2Gb	2.7V-3.6V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LQ20E	2Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25LQ40E	4Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm
GD25LF80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm
GD25LQ80E	8Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm SOP8 150mil
GD25LF16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm SOP8 150mil
GD25LQ16E	16Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil
GD25LF32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x2mm USON8 3x4mm SOP8 150mil
GD25LQ32E	32Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x2mm USON8 3x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LF64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 3x4mm SOP8 150mil
GD25LQ64E	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	133MHz(x1, x2, x4)	USON8 3x4mm USON8 4x4mm SOP8 150mil SOP8 208mil WSON8 6x5mm
GD25LT64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	200MHz(x1, x4) 200MHz(DTR)	SOP8 208mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25LX64J	64Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LF128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	USON8 4x4mm SOP8 208mil WSON8 6x5mm TFBGA24 8x6mm (5x5 ball array)
GD25LX128J	128Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LF256F	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 6x5mm WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)

Automotive-Grade SPI NOR Flash Selection Guide

Part No.	Density	Voltage	Oragnization	I/O Bus	Frequency (MHz)	Packages
GD25LX256E	256Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25LF512MF	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD25LT512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25LX512ME	512Mb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LF01GF	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil WSON8 8x6mm TFBGA24 8x6mm (5x5 ball array)
GD55LT01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX01GE	1Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LF02GF	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55LT02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Quad	166MHz(x1, x4) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD55LX02GE	2Gb	1.65V-2.0V	4KB / 32KB / 64KB	Single / Octal	166MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25WQ40E	4Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm
GD25WQ80E	8Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm
GD25WQ16E	16Mb	1.65V-3.6V	4KB / 32KB / 64KB	Single / Dual / Quad	104MHz(x1, x2, x4)	USON8 3x2mm
GD25NX64J	64Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NF128J	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NX128J	128Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Octal	200MHz(x1, x8) 200MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)
GD25NF256F	256Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD25NF512MF	512Mb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55NF01GF	1Gb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	SOP16 300mil TFBGA24 8x6mm (5x5 ball array)
GD55NF02GF	2Gb	1.65V-2.0V/1.10V-1.30V	4KB / 32KB / 64KB	Single / Dual / Quad	166MHz(x1, x2, x4) 104MHz(DTR)	TFBGA24 8x6mm (5x5 ball array)

Product Series

3V	Q: Quad I/O B : Quad I/O, Default x4 I/O F : Quad I/O, Default x4 I/O, High Performance, ECC T : Quad I/O, Default x4 I/O, Ultra-High Performance, ECC X : Octal I/O, Ultra-High Performance, ECC	1.8V	LQ: Quad I/O LT: Quad I/O, Default x4 I/O, Ultra-High Performance, ECC LF: Quad I/O, Default x4 I/O, High Performance, ECC* LX: Octal I/O, Ultra-High Performance, ECC	1.65V~3.6V	WQ: Quad I/O	1.8V VCC, 1.2V VIO	NF: 1.2V VIO, Quad I/O, Default x4 I/O, High Performance, ECC NX: 1.2V VIO, Octal I/O, Ultra-High Performance, ECC	

* Supported only by versions F and J
If you require Flash products with other densities, please contact GigaDevice.

SPI NAND Flash

SPI NAND Flash Features

1.8V

Power Supply Voltage
- 1.7V~2.0V

Density
- 512Mb/1Gb/2Gb/4Gb/8Gb

High Speed Clock Frequency
- 133MHz/104MHz/80MHz

Flexible Memory Architecture
- 2K-Byte/4K-Byte page for read and program
- 128K-Byte/256K-Byte per block for erase

Temperature Grade
- Industrial -40~85℃ / Industrial+ -40~105℃ / Automotive -40~105℃

Advanced Feature for SPI NAND
- Internal ECC algorithm
- Support DTR
- Support Continuous Read/Cache Read(M9 Series)
- Support Deep Power Down
- Support Bad Block Management

3V

Power Supply Voltage
- 2.7V~3.6V

Density
- 512Mb/1Gb/2Gb/4Gb/8Gb

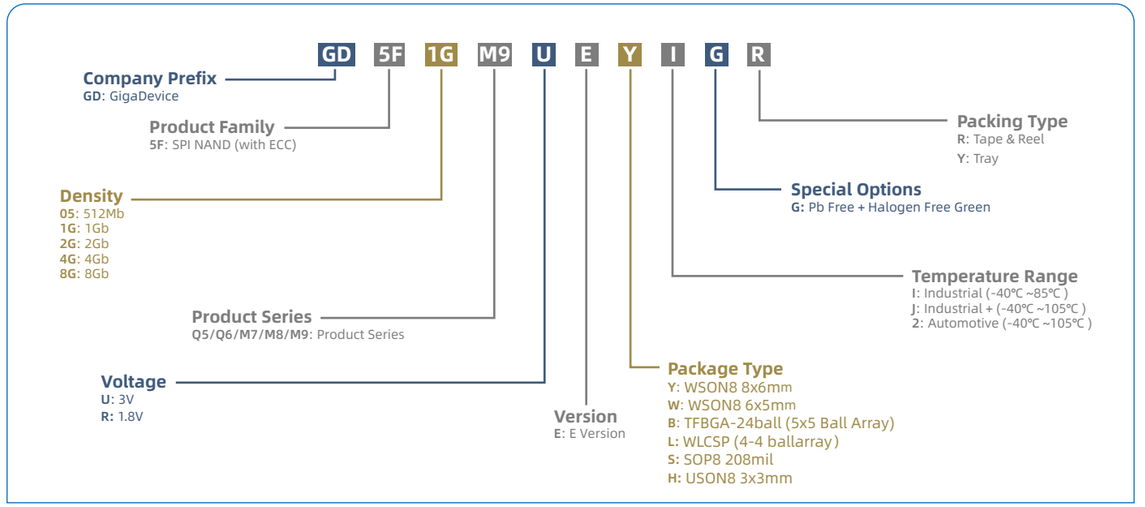
High Speed Clock Frequency
- 166MHz/133MHz/104MHz

Flexible Memory Architecture
- 2K-Byte/4K-Byte page for read and program
- 128K-Byte/256K-Byte per block for erase

Temperature Grade
- Industrial -40~85℃ / Industrial+ -40~105℃ / Automotive -40~105℃

Advanced Feature for SPI NAND
- Internal ECC algorithm
- Support DTR
- Support Continuous Read/Cache Read(M9 Series)
- Support Bad Block Management

SPI NAND Flash Part Number Definition



Industrial-Grade SPI NAND Flash Selection Guide

Part No.	Density	Voltage	Frequency	I/O Bus	Page Size	Package
GD5F05M7UE	512Mb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/SOP8 208mil/ USON8 3x3mm
GD5F1GQ5UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F1GM7UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)/WLCSP(4-4 ball array) (1)
GD5F1GM9UE (2)	1Gb	2.7V-3.6V	166MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5UE	2Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F2GM7UE	2Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)/WLCSP(4-4 ball array) (1)
GD5F4GQ6UE	4Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F4GM7UE	4Gb	2.7V-3.6V	133MHz	x1/x2/x4	4KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)
GD5F8GM8UE	8Gb	2.7V-3.6V	133MHz	x1/x2/x4	4KB	WSON8 8x6mm/TFBGA24 8x6mm(5x5 ball array)
GD5F05M7RE	512Mb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/SOP8 208mil/ USON8 3x3mm
GD5F1GQ5RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F1GM7RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)/WLCSP(4-4 ball array) (1)
GD5F1GM9RE (2)	1Gb	1.7V-2.0V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)
GD5F2GQ5RE	2Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F2GM7RE	2Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)/WLCSP(4-4 ball array) (1)
GD5F4GQ6RE	4Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F4GM7RE	4Gb	1.7V-2.0V	104MHz	x1/x2/x4	4KB	WSON8 8x6mm/WSON8 6x5mm/TFBGA24 8x6mm(5x5 ball array)
GD5F8GM8RE	8Gb	1.7V-2.0V	104MHz	x1/x2/x4	4KB	WSON8 8x6mm/TFBGA24 8x6mm(5x5 ball array)

Note:
(1) The WLCSP package is not a recommended package. If required, please contact GigaDevice to confirm availability.
(2) The GD5F1GM9 product supports the Continuous Read function.

Automotive-Grade SPI NAND Flash Selection Guide

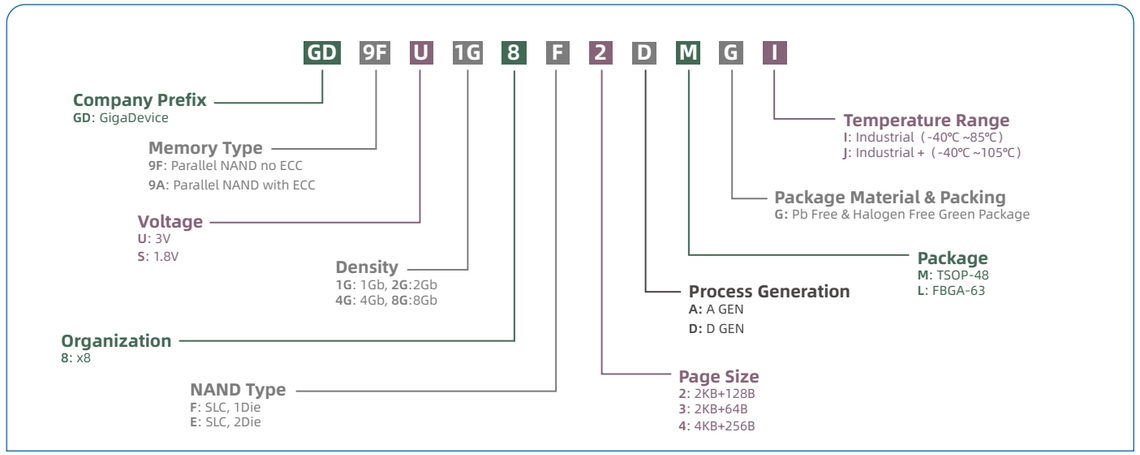
Part No.	Density	Voltage	Frequency	I/O Bus	Page Size	Package
GD5F1GQ5UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F1GM7UE	1Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/TFBGA24 8x6mm (5x5 ball array)
GD5F2GQ5UE	2Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F2GM7UE	2Gb	2.7V-3.6V	133MHz	x1/x2/x4	2KB	WSON8 8x6mm/TFBGA24 8x6mm (5x5 ball array)
GD5F4GQ6UE	4Gb	2.7V-3.6V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F1GQ5RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F1GM7RE	1Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm/TFBGA24 8x6mm (5x5 ball array)
GD5F2GQ5RE	2Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WSON8 8x6mm
GD5F2GM7RE	2Gb	1.7V-2.0V	104MHz	x1/x2/x4	2KB	WSON8 8x6mm/TFBGA24 8x6mm (5x5 ball array)
GD5F4GQ6RE	4Gb	1.7V-2.0V	80MHz	x1/x2/x4	2KB	WSON8 8x6mm

Parallel NAND Flash

GD Parallel NAND Flash Features

1.8V	3V
Power Supply Voltage • 1.7V~1.95V **Density** • 1Gb/2Gb/4Gb/8Gb **Page Size** • 2KB+64B/2KB+128B/4KB+256B **Flash Array to Register Time** • 25μs **I/O Read Performance** • 20ns/25ns/45ns **Bus Width** • x8 options **Temperature Grade** • Industrial -40~ 85℃ / Industrial -40~105℃ **ONFI 1.0 compatible**	**Power Supply Voltage** • 2.7V~3.6V **Density** • 1Gb/2Gb/4Gb/8Gb **Page Size** • 2KB+64B/2KB+128B/4KB+256B **Flash Array to Register Time** • 25μs **I/O Read Performance** • 12ns/20ns/25ns **Bus Width** • x8 options **Temperature Grade** • Industrial -40~ 85℃ / Industrial+ -40~105℃ **ONFI 1.0 compatible**

Parallel NAND Flash Part Number Definition



Industrial-Grade Parallel NAND Flash Selection Guide

Part No.	Density	Voltage	Sequential Access Time	I/O Bus	Page Size	ECC Requirement	Package
GD9FU1G8F2D	1Gb	2.7V-3.6V	12ns	x8	2KB+128B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU2G8F3A (1)	2Gb	2.7V-3.6V	20ns	x8	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU2G8F2A	2Gb	2.7V-3.6V	20ns	x8	2KB+128B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU4G8F3A	4Gb	2.7V-3.6V	20ns	x8	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU4G8F4D	4Gb	2.7V-3.6V	12ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU8G8E3A	8Gb	2.7V-3.6V	20ns	x8	2KB+64B	4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FU8G8E4D	8Gb	2.7V-3.6V	12ns	x8	4KB+256B	8bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU2G8F3A (1)	2Gb	2.7V-3.6V	20ns	x8	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU4G8F3A (1)	4Gb	2.7V-3.6V	20ns	x8	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9AU8G8E3A (1)	8Gb	2.7V-3.6V	20ns	x8	2KB+64B	Internal 4bit/512B	TSOP48 20x12mm/BGA63 9x11mm
GD9FS1G8F2D	1Gb	1.7V-1.95V	20ns	x8	2KB+128B	8bit/512B	BGA63 9x11mm
GD9FS2G8F3A (1)	2Gb	1.7V-1.95V	25ns	x8	2KB+64B	4bit/512B	BGA63 9x11mm
GD9FS2G8F2A	2Gb	1.7V-1.95V	25ns	x8	2KB+128B	4bit/512B	BGA63 9x11mm
GD9FS4G8F3A	4Gb	1.7V-1.95V	25ns	x8	2KB+64B	4bit/512B	BGA63 9x11mm
GD9FS4G8F4D	4Gb	1.7V-1.95V	20ns	x8	4KB+256B	8bit/512B	BGA63 9x11mm
GD9FS8G8E3A	8Gb	1.7V-1.95V	25ns	x8	2KB+64B	4bit/512B	BGA63 9x11mm
GD9FS8G8E4D	8Gb	1.7V-1.95V	20ns	x8	4KB+256B	8bit/512B	BGA63 9x11mm
GD9AS2G8F3A (1)	2Gb	1.7V-1.95V	25ns	x8	2KB+64B	Internal 4bit/512B	BGA63 9x11mm
GD9AS4G8F3A (1)	4Gb	1.7V-1.95V	25ns	x8	2KB+64B	Internal 4bit/512B	BGA63 9x11mm
GD9AS8G8E3A (1)	8Gb	1.7V-1.95V	25ns	x8	2KB+64B	Internal 4bit/512B	BGA63 9x11mm

Note:
(1) This type of product is not recommended. If required, please contact GigaDevice to confirm availability.

Flash Package Options

Note:
1. The values provided are the typical values for length, width and pitch, as well as the max values for Height.
2. The pictures are for reference only. Please always verify your selection with the product data sheet.

T

SOP8 150mil

Length	4.90mm
Width	6.00mm
Height (Max)	1.75mm
Pitch	1.27mm

S

SOP8 208mil

Length	5.23mm
Width	7.90mm
Height (Max)	2.16mm
Pitch	1.27mm

F

SOP16 300mil

Length	10.30mm
Width	10.35mm
Height (Max)	2.65mm
Pitch	1.27mm

N

USON8 3x4mm

Length	3.00mm
Width	4.00mm
Height (Max)	0.60mm
Pitch	0.80mm

Q

USON8 4x4mm

Length	4.00mm
Width	4.00mm
Height (Max)	0.50mm
Pitch	0.80mm

W

WSON8 6x5mm

Length	6.00mm
Width	5.00mm
Height (Max)	0.80mm
Pitch	1.27mm

K6

USON6 1.2x1.2mm

Length	1.20mm
Width	1.20mm
Height (Max)	0.40mm
Pitch	0.40mm

K

USON8 1.5x1.5mm

Length	1.50mm
Width	1.50mm
Height (Max)	0.50mm
Pitch	0.40mm

XE

FO-USON8 3x2mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.40mm
Pitch	0.50mm

Y

WSON8 8x6mm

Length	8.00mm
Width	6.00mm
Height (Max)	0.80mm
Pitch	1.27mm

L/3/4/L6

WLCSP

Depends on specific product

B

TFBGA-24ball 6x8mm (5x5ball array)

Length	6.00mm
Width	8.00mm
Height (Max)	1.20mm
Pitch	1.00mm

E

USON8 3x2mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.50mm
Pitch	0.50mm

E4

USON8 3x2mm-0.4mm

Length	3.00mm
Width	2.00mm
Height (Max)	0.40mm
Pitch	0.50mm

XH

FO-USON8 3x3mm

Length	3.00mm
Width	3.00mm
Height (Max)	0.40mm
Pitch	0.80mm

L

FBGA63

Length	9.00mm
Width	11.00mm
Height (Max)	1.00mm
Pitch	0.80mm

M

TSOP48

Length	20.00mm
Width	12.00mm
Height (Max)	1.20mm
Pitch	0.50mm

GD32 MCU Family

Core Type	Arm® Cortex®-M 32-bit MCUs (Flash KB/RAM KB)						RISC-V MCUs
	Cortex®-M23	Cortex®-M3	Cortex®-M4	Cortex®-M33		Cortex®-M7	RISC-V
High-Performance		GD32F20x 120MHz, 3M/256K	GD32F4xx 240MHz, 3M/768K	GD32F50x 280MHz, 1024K/192K GD32G553 216MHz, 512K/128K GD32E50x 180MHz, 512K/128K	GD32F527 200MHz, 7.5M/1M GD32E51x 180MHz, 512K/128K	GD32H75x 600MHz, 3840K/1024K GD32H73x 600MHz, 3840K/1024K	
Main-Stream		GD32F10x 108MHz, 3M/96K	GD32F30x 120MHz, 3M/96K GD32C1x3 120MHz, 128K/32K GD32E1x3 120MHz, 128K/32K	GD32E502 100MHz, 384K/48K			GD32VF103 120MHz, 128K/32K
Entry-Level	GD32E23x 72MHz, 128K/16K GD32C231 48MHz, 64K/12K	GD32F1x0 72MHz, 64K/8K	GD32F3x0 108MHz, 128K/16K				
Low-Power Consumption	GD32L235 64MHz, 128K/24K GD32L233 64MHz, 256K/32K						
Wireless				GD32W515 180MHz, 2M/448K			GD32VW553 160MHz, 4M/320K
Automotive				GD32A513 100MHz, 384K/48K	GD32A503 100MHz, 384K/48K	GD32A74x 160/320MHz, Lockstep core GD32A72x 160/320MHz, Dual core GD32A711/712 120/160MHz, Single core GD32A714 160/320MHz, Single core	
Specific	GD32E232 72MHz, 64K/8K		GD32FFPR 168MHz, 1M/128K	GD32E501 100MHz, 512K/32K	GD32EPRT 168MHz, 384K/96K+4M		

High-Performance MCU

GD32H7 Series 32-bit Arm® Cortex®-M7 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer								Connectivity													EXMC	Analog Interface				Package
			Flash	SRAM		GPTM (16bit)	GPTM (32bit)	Advanced TM (16bit)	Basic TM (32bit)	Basic TM (64bit)	SysTick (24bit)	WDG	RTC	U(S) ART	I²C	SPI	OSPI	CAN	I²S	USB OTG	Ethernet	EtherCAT Slave Controller (ESC)	SDIO	MIPI-DSI	LCD-TFT	SAI		14bit ADC Units (CHs)	12bit ADC Units (CHs)	12bit DAC Units	COMP	
GD32H737	GD32H737VGT6	600	1024K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	2	4	1	1		2			2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H737VIT6	600	2048K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H737VMT6	600	3840K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H737ZGT6	600	1024K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	2	4	1	1		2			3	1	1(16), 1(14)	1(12)	1	2	LQFP144
	GD32H737ZIT6	600	2048K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	3	4	1	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP144
	GD32H737ZMT6	600	3840K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	3	4	1	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP144
	GD32H737IGT6	600	1024K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	2	4	2	1		2			3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H737IIT6	600	2048K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H737IMT6	600	3840K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H737IGK6	600	1024K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	2	4	2	2		2			3	1	1(20), 1(18)	1(17)	1	2	BGA176
	GD32H737IIK6	600	2048K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	2		2	1		3	1	1(20), 1(18)	1(17)	1	2	BGA176
	GD32H737IMK6	600	3840K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	3	4	2	2		2	1		3	1	1(20), 1(18)	1(17)	1	2	BGA176
GD32H757	GD32H757VGT6	600	1024K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H757VIT6	600	2048K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H757VMT6	600	3840K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	LQFP100
	GD32H757VGJ6	600	1024K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	BGA100
	GD32H757VIJ6	600	2048K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	BGA100
	GD32H757VMJ6	600	3840K	1024K	78	10	4	2	2	2	1	2	1	8	4	5	1	3xFD	4	1	1		2	1		2	1	1(14), 1(12)	1(4)	1	2	BGA100
	GD32H757ZGT6	600	1024K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP144
	GD32H757ZIT6	600	2048K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP144
	GD32H757ZMT6	600	3840K	1024K	110	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	1	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP144
GD32H759	GD32H759IGT6	600	1024K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H759IIT6	600	2048K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H759IMT6	600	3840K	1024K	115	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	1		2	1		3	1	1(16), 1(14)	1(12)	1	2	LQFP176
	GD32H759IGK6	600	1024K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1		3	1	1(20), 1(18)	1(17)	1	2	BGA176
	GD32H759IIK6	600	2048K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1		3	1	1(20), 1(18)	1(17)	1	2	BGA176
	GD32H759IMK6	600	3840K	1024K	124	12	4	2	2	2	1	2	1	8	4	6	2	3xFD	4	2	2		2	1		3	1	1(20), 1(18)	1(17)	1	2	BGA176
GD32H75E	GD32H75EYMJ6	600	3840K	1024K	116	10	4	2	2	2	1	2	1	8	4	6	1	3xFD	4	2	2xPHY	1					1	2(22)	1(15)	1	2	BGA240
	GD32H75EYMJ6B	600	3840K	1024K	113	9	3	2	2	2	1	2	1	8	4	6	1	3xFD	4	2	0	1					1	2(20)	1(15)	1	2	BGA240

High-Performance MCU

GD32G5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer									Connectivity								EXMC	AES/ DES	FAC/ FFT	Analog Interface			Package
			Flash	SRAM		GPTM (16bit)	GPTM (32bit)	LPTM (16bit)	HRTM (CHs) (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I^2C	SPI	QSPI	CAN	TRIGSEL	CLA	HPDF				12bit ADC Units(CHs)	12bit DAC Units	COMP	
GD32G553	GD32G553QET7	216	512K	128K	up to 107	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(42)	8	8	LQFP128
	GD32G553QET3	170	512K	128K	up to 107	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(42)	8	8	LQFP128
	GD32G553VET7	216	512K	128K	up to 86	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(42)	8	8	LQFP100
	GD32G553VET3	170	512K	128K	up to 86	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(42)	8	8	LQFP100
	GD32G553MEY7TR	216	512K	128K	up to 67	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(39)	8	8	WLCSP81
	GD32G553MET7	216	512K	128K	up to 66	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(38)	8	8	LQFP80
	GD32G553MET3	170	512K	128K	up to 66	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1	1	•	•	4(38)	8	8	LQFP80
	GD32G553RET7	216	512K	128K	up to 52	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(26)	8	7	LQFP64
	GD32G553RET3	170	512K	128K	up to 52	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(26)	8	7	LQFP64
	GD32G553CET7	216	512K	128K	up to 38	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(20)	8	7	LQFP48
	GD32G553CET3	170	512K	128K	up to 38	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(20)	8	7	LQFP48
	GD32G553CEU7	216	512K	128K	up to 42	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(21)	8	7	QFN48
	GD32G553CEU3	170	512K	128K	up to 42	5	2	1	1(16)	3	2	1	2	1	3+2	4	3	1	3xFD	1	1	1		•	•	4(21)	8	7	QFN48

GD32F527 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity												EXMC/ SDRAM	Analog Interface		Package
			Flash	Code-Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	USART/ UART	I^2C	SPI	CAN	USB OTG	I^2S	SDIO	SAI	LCD-TFT	Camera	Ethernet	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F527	GD32F527RMT7	200	4096K	1536K	1088K	51	8	2	2	2	2	1	4+2	3	3	2xFD	FS+HS	2	1	0	0	1	1	0		3(16)	2	LQFP64
	GD32F527RST7	200	7680K	2048K	576K	51	8	2	2	2	2	1	4+2	3	3	2xFD	FS+HS	2	1	0	0	1	1	0		3(16)	2	LQFP64
	GD32F527VMT7	200	4096K	1536K	1088K	82	8	2	2	2	2	1	4+4	3	5	2xFD	FS+HS	2	1	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F527VST7	200	7680K	2048K	576K	82	8	2	2	2	2	1	4+4	3	5	2xFD	FS+HS	2	1	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F527ZMT7	200	4096K	1536K	1088K	114	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F527ZST7	200	7680K	2048K	576K	114	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F527IMT7	200	4096K	1536K	1088K	140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F527IST7	200	7680K	2048K	576K	140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F527IMK7	200	4096K	1536K	1088K	140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F527ISK7	200	7680K	2048K	576K	140	8	2	2	2	2	1	4+4	6	6	2xFD	FS+HS	2	1	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32F50x Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity											EXMC/ SDRAM	Analog Interface		Package
			Flash	Code-Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	USART/ UART	I²C	SPI	CAN	USB OTG	I²S	SDIO	SAI	LCD-TFT	Camera	Ethernet	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F503	GD32F503KCU6	252	256K	256K	64K	26	5	2	1	2	2	1	2+0	2	2	2xFD	FS	1	0	0	0	0	0	0		3(10)	1	QFN32
	GD32F503KEU6	252	512K	256K	64K	26	5	2	1	2	2	1	2+0	2	2	2xFD	FS	1	0	0	0	0	0	0		3(10)	1	QFN32
	GD32F503CCT6	252	256K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CET6	252	512K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CGT6	252	1024K	192K	128K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CCO6	252	256K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	QFN48
	GD32F503CEO6	252	512K	256K	64K	41	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(14)	1	QFN48
	GD32F503CGO6	252	1024K	192K	128K	41	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(14)	1	QFN48
	GD32F503RCT6	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RET6	252	512K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RGT6	252	1024K	192K	128K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RCO6	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	QFN64
	GD32F503REO6	252	512K	256K	64K	56	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(19)	1	QFN64
	GD32F503RGO6	252	1024K	192K	128K	56	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(19)	1	QFN64
	GD32F503RCL6	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503REL6	252	512K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503RGL6	252	1024K	192K	128K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503VCT6	252	256K	256K	64K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F503VET6	252	512K	256K	64K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F503VGT6	252	1024K	192K	128K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F503KCU7	252	256K	256K	64K	26	5	2	1	2	2	1	2+0	2	2	2xFD	FS	1	0	0	0	0	0	0		3(10)	1	QFN32
	GD32F503KEU7	252	512K	256K	64K	26	5	2	1	2	2	1	2+0	2	2	2xFD	FS	1	0	0	0	0	0	0		3(10)	1	QFN32
	GD32F503CCT7	252	256K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CET7	252	512K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CGT7	252	1024K	192K	128K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F503CCO7	252	256K	256K	64K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	QFN48
	GD32F503CEO7	252	512K	256K	64K	41	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(14)	1	QFN48
	GD32F503CGO7	252	1024K	192K	128K	41	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(14)	1	QFN48
	GD32F503RCT7	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RET7	252	512K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RGT7	252	1024K	192K	128K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F503RCO7	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	QFN64
	GD32F503REO7	252	512K	256K	64K	56	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(19)	1	QFN64
	GD32F503RGO7	252	1024K	192K	128K	56	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(19)	1	QFN64
	GD32F503RCL7	252	256K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503REL7	252	512K	256K	64K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503RGL7	252	1024K	192K	128K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F503VCT7	252	256K	256K	64K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F503VET7	252	512K	256K	64K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F503VGT7	252	1024K	192K	128K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
GD32F505	GD32F505CET7	280	512K	192K	128K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F505CGT7	280	1024K	128K	192K	37	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(12)	1	LQFP48
	GD32F505CGO7	280	1024K	128K	192K	41	5	2	1	2	2	1	3+0	2	3	2xFD	FS	2	0	0	0	0	0	0		3(14)	1	QFN48
	GD32F505RET7	280	512K	192K	128K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F505RGT7	280	1024K	128K	192K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	LQFP64
	GD32F505RGO7	280	1024K	128K	192K	56	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(19)	1	QFN64
	GD32F505RGL7	280	1024K	128K	192K	51	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(18)	1	BGA64
	GD32F505VET7	280	512K	192K	128K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100
	GD32F505VGT7	280	1024K	128K	192K	80	5	2	1	2	2	1	3+2	2	3	2xFD	FS	2	0	0	0	0	0	0	1	3(25)	1	LQFP100

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/ SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	USART +UART	I^2C	SPI	CAN 2.0B	USB OTG	I^2S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F425	GD32F425RET6	200	512K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425RGT6	200	1024K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425RKT6	200	3072K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP64
	GD32F425VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F425VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	LQFP100
	GD32F425VGH6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F425VKH6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(16)	2	BGA100
	GD32F425ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144
	GD32F425ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1				3(24)	2	LQFP144
GD32F427	GD32F427RET6	200	512K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427RGT6	200	1024K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427RKT6	200	3072K	256K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F427VET6	200	512K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F427VEH6	200	512K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427VGH6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427VKH6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F427ZET6	200	512K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F427IEH6	200	512K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F427IGH6	200	1024K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F427IKH6	200	3072K	256K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
GD32F470	GD32F470VET6	240	512K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VGT6	240	1024K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VIT6	240	2048K	768K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VKT6	240	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F470VGH6	240	1024K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470VIH6	240	2048K	768K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470VKH6	240	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	BGA100
	GD32F470ZET6	240	512K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZGT6	240	1024K	512K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZIT6	240	2048K	768K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470ZKT6	240	3072K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F470IGH6	240	1024K	512K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F470IIH6	240	2048K	768K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F470IKH6	240	3072K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/ SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	USART +UART	I^2C	SPI	CAN 2.0B	USB OTG	I^2S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F403	GD32F403RCT6	168	256K	64K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RET6	168	512K	96K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RGT6	168	1024K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RIT6	168	2048K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403RKT6	168	3072K	128K	up to 51	8	2		2	2	1	3+2	2	3	2	OTG	2	1					0/0	3(16)	2	LQFP64
	GD32F403VCT6	168	256K	64K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VET6	168	512K	96K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VGT6	168	1024K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VIT6	168	2048K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VKT6	168	3072K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	LQFP100
	GD32F403VCH6	168	256K	64K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VEH6	168	512K	96K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VGH6	168	1024K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VIH6	168	2048K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403VKH6	168	3072K	128K	up to 80	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(16)	2	BGA100
	GD32F403ZCT6	168	256K	64K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZET6	168	512K	96K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZGT6	168	1024K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZIT6	168	2048K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
	GD32F403ZKT6	168	3072K	128K	up to 112	8	2		2	2	1	3+2	2	3	2	OTG	2	1					1/0	3(21)	2	LQFP144
GD32F405	GD32F405RET6	168	512K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	LQFP64
	GD32F405RGT6	168	1024K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	LQFP64
	GD32F405RKT6	168	3072K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	LQFP64
	GD32F405VGT6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	LQFP100
	GD32F405VKT6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	LQFP100
	GD32F405VGH6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	BGA100
	GD32F405VKH6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(16)	2	BGA100
	GD32F405ZGT6	168	1024K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(24)	2	LQFP144
	GD32F405ZKT6	168	3072K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1	1					3(24)	2	LQFP144

High-Performance MCU

GD32F4 Series 32-bit Arm® Cortex®-M4 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/ SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	GPTM (32bit)	Basic TM (16bit)	WDG	RTC	USART +UART	I^2C	SPI	CAN 2.0B	USB OTG	I^2S	SDIO	LCD- SDIO TFT	Camera	ETH MAC	IPA		12bit ADC Units (CHs)	12bit DAC Units	
GD32F407	GD32F407RET6	168	512K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407RGT6	168	1024K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407RKT6	168	3072K	192K	up to 51	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1			3(16)	2	LQFP64
	GD32F407VET6	168	512K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VGT6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VKT6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	LQFP100
	GD32F407VEH6	168	512K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407VGH6	168	1024K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407VKH6	168	3072K	192K	up to 82	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/0	3(16)	2	BGA100
	GD32F407ZET6	168	512K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407ZGT6	168	1024K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407ZKT6	168	3072K	192K	up to 114	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	LQFP144
	GD32F407IEH6	168	512K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F407IGH6	168	1024K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
	GD32F407IKH6	168	3072K	192K	up to 140	8	2	2	2	2	1	4+2	3	3	2	FS+HS	2	1		1	1		1/1	3(24)	2	BGA176
GD32F450	GD32F450VET6	200	512K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VGT6	200	1024K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VIT6	200	2048K	512K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450VKT6	200	3072K	256K	up to 82	8	2	2	2	2	1	4+4	3	5	2	FS+HS	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F450ZET6	200	512K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZGT6	200	1024K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZIT6	200	2048K	512K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450ZKT6	200	3072K	256K	up to 114	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F450IGH6	200	1024K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F450IIH6	200	2048K	512K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176
	GD32F450IKH6	200	3072K	256K	up to 140	8	2	2	2	2	1	4+4	3	6	2	FS+HS	2	1	1	1	1	1	1/1	3(24)	2	BGA176

High-Performance MCU

GD32E5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity											EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0	I²S	SDIO	Ethernet	TMU	HRTIM	COMP		12bit ADC Units (CHs)	12bit DAC Units	
GD32E513	GD32E513CCO6	180	256K	96K	up to 37	1	6	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	QFN48
	GD32E513CCT6	180	256K	96K	up to 37	1	6	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	LQFP48
	GD32E513CET6	180	512K	128K	up to 37	1	12	1	2	1	2	1	3+0	3	3	2	FS	2			•	•	3		3(10)	3	LQFP48
	GD32E513RCT6	180	256K	96K	up to 51	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3		3(16)	3	LQFP64
	GD32E513RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3		3(16)	3	LQFP64
	GD32E513VCT6	180	256K	96K	up to 80	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(16)	3	LQFP100
	GD32E513VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(16)	3	LQFP100
	GD32E513ZCT6	180	256K	96K	up to 112	1	6	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(21)	3	LQFP144
	GD32E513ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	2	FS	2	1		•	•	3	•	3(21)	3	LQFP144
GD32E517	GD32E517RCT6	180	256K	96K	up to 51	1	6	1	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3		3(16)	3	LQFP64
	GD32E517RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3		3(16)	3	LQFP64
	GD32E517VCT6	180	256K	96K	up to 80	1	6	1	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3	•	3(16)	3	LQFP100
	GD32E517VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3	•	3(16)	3	LQFP100
	GD32E517ZCT6	180	256K	96K	up to 112	1	6	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3	•	3(21)	3	LQFP144
	GD32E517ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	3	HS OTG	2	1	•	•	•	3	•	3(21)	3	LQFP144
GD32E518	GD32E518CET6	180	512K	128K	up to 37	1	12	2	2	1	2	1	3+0	3	3	3xFD	HS OTG	2			•	•	3		3(10)	3	LQFP48
	GD32E518RET6	180	512K	128K	up to 51	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1	•	•	•	3		3(16)	3	LQFP64
	GD32E518VET6	180	512K	128K	up to 80	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1	•	•	•	3	•	3(16)	3	LQFP100
	GD32E518ZET6	180	512K	128K	up to 112	1	12	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2	1	•	•	•	3	•	3(21)	3	LQFP144
GD32E503	GD32E503CCT6	180	256K	96K	up to 37	1	3	1	2	1	2	1	3+0	3	3	2	FS	2				•			3(10)	2	LQFP48
	GD32E503CET6	180	512K	128K	up to 37	1	9	1	2	1	2	1	3+0	3	3	2	FS	2				•			3(10)	2	LQFP48
	GD32E503RCT6	180	256K	96K	up to 51	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1			•			3(16)	2	LQFP64
	GD32E503RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1			•			3(16)	2	LQFP64
	GD32E503VCT6	180	256K	96K	up to 80	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1			•		•	3(16)	2	LQFP100
	GD32E503VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1			•		•	3(16)	2	LQFP100
	GD32E503ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	2	FS	2	1			•		•	3(21)	2	LQFP144
	GD32E503ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	2	FS	2	1			•		•	3(21)	2	LQFP144
GD32E505	GD32E505RBT6	180	128K	80K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505RCT6	180	256K	96K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3		2(16)	2	LQFP64
	GD32E505VCT6	180	256K	96K	up to 80	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP100
	GD32E505VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP100
	GD32E505ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP144
	GD32E505ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2			•	•	3	•	2(16)	2	LQFP144

High-Performance MCU

GD32E5 Series 32-bit Arm® Cortex®-M33 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity											EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0	I²S	SDIO	Ethernet	TMU	HRTIM	COMP		12bit ADC Units (CHs)	12bit DAC Units	
GD32E507	GD32E507RCT6	180	256K	96K	up to 51	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E507RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E507VCT6	180	256K	96K	up to 80	1	3	1	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E507VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E507ZCT6	180	256K	96K	up to 112	1	3	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144
	GD32E507ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144
GD32E508	GD32E508RET6	180	512K	128K	up to 51	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3		2(16)	2	LQFP64
	GD32E508VET6	180	512K	128K	up to 80	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP100
	GD32E508ZET6	180	512K	128K	up to 112	1	9	2	2	1	2	1	4+2	3	3	3xFD	HS OTG	2		•	•	•	3	•	2(16)	2	LQFP144

GD32F2 Series 32-bit Arm® Cortex®-M3 High-Performance MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity											EXMC/ SDRAM	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Adv TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	LCD- TFT	Camera	ETH MAC	Crypto/ Hash		12bit ADC Units (CHs)	12bit DAC Units	
GD32F205	GD32F205RCT6	120	256K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1						3(16)	2	LQFP64
	GD32F205RET6	120	512K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1						3(16)	2	LQFP64
	GD32F205RGT6	120	1024K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1						3(16)	2	LQFP64
	GD32F205RKT6	120	3072K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1						3(16)	2	LQFP64
	GD32F205VCT6	120	256K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100
	GD32F205VET6	120	512K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100
	GD32F205VGT6	120	1024K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100
	GD32F205VKT6	120	3072K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/0	3(16)	2	LQFP100
	GD32F205ZCT6	120	256K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144
	GD32F205ZET6	120	512K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144
	GD32F205ZGT6	120	1024K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144
	GD32F205ZKT6	120	3072K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1				1/1	3(24)	2	LQFP144
GD32F207	GD32F207RCT6	120	256K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1		3(16)	2	LQFP64
	GD32F207RET6	120	512K	128K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1		3(16)	2	LQFP64
	GD32F207RGT6	120	1024K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1		3(16)	2	LQFP64
	GD32F207RKT6	120	3072K	256K	up to 51	10	2	2	1	2	1	4+2	3	3	2	OTG	2	1		1	1	1		3(16)	2	LQFP64
	GD32F207VCT6	120	256K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F207VET6	120	512K	128K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F207VGT6	120	1024K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F207VKT6	120	3072K	256K	up to 82	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/0	3(16)	2	LQFP100
	GD32F207ZCT6	120	256K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F207ZET6	120	512K	128K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F207ZGT6	120	1024K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F207ZKT6	120	3072K	256K	up to 114	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP144
	GD32F207IET6	120	512K	128K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F207IGT6	120	1024K	256K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176
	GD32F207IKT6	120	3072K	256K	up to 140	10	2	2	1	2	1	4+4	3	3	2	OTG	2	1	1	1	1	1	1/1	3(24)	2	LQFP176

Main-Stream MCU

GD32F30x Series 32-bit Arm® Cortex®-M4 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I^2C	SPI	CAN 2.0B	USB 2.0 FS	I^2S	SDIO	Ethernet		12bit ADC Units (CHs)	12bit DAC Units	
GD32F303	GD32F303CBT6	120	128K	32K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CCT6	120	256K	48K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CET6	120	512K	64K	up to 37	4	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303CGT6	120	1024K	96K	up to 37	10	1	2	1	2	1	3	2	3	1	1	2				3(10)	2	LQFP48
	GD32F303RBT6	120	128K	32K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2				3(16)	2	LQFP64
	GD32F303RCT6	120	256K	48K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RET6	120	512K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RIT6	120	2048K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303RKT6	120	3072K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F303VBT6	120	128K	32K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2			•	3(16)	2	LQFP100
	GD32F303VCT6	120	256K	48K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VET6	120	512K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VIT6	120	2048K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303VKT6	120	3072K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F303ZCT6	120	256K	48K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZET6	120	512K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZIT6	120	2048K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F303ZKT6	120	3072K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
GD32F305	GD32F305RBT6	120	128K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RCT6	120	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RET6	120	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F305VCT6	120	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305VET6	120	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F305ZCT6	120	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F305ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F305ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
GD32F307	GD32F307RCT6	120	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307RET6	120	512K	96K	up to 51	4	2	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307RGT6	120	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	2	OTG	2		•		2(16)	2	LQFP64
	GD32F307VCT6	120	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307VET6	120	512K	96K	up to 80	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307VGT6	120	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP100
	GD32F307ZCT6	120	256K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F307ZET6	120	512K	96K	up to 112	4	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144
	GD32F307ZGT6	120	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	2	OTG	2		•	•	2(16)	2	LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32F101	GD32F101T4U6	56	16K	4K	up to 26	2			1	2	1	2	1	1							1(10)		QFN36
	GD32F101T6U6	56	32K	6K	up to 26	2			1	2	1	2	1	1							1(10)		QFN36
	GD32F101T8U6	56	64K	10K	up to 26	3			1	2	1	2	1	1							1(10)		QFN36
	GD32F101TBU6	56	128K	16K	up to 26	3			1	2	1	2	1	1							1(10)		QFN36
	GD32F101C4T6	56	16K	4K	up to 37	2			1	2	1	2	1	1							1(10)		LQFP48
	GD32F101C6T6	56	32K	6K	up to 37	2			1	2	1	2	1	1							1(10)		LQFP48
	GD32F101C8T6	56	64K	10K	up to 37	3			1	2	1	3	2	2							1(10)		LQFP48
	GD32F101CBT6	56	128K	16K	up to 37	3			1	2	1	3	2	2							1(10)		LQFP48
	GD32F101R4T6	56	16K	4K	up to 51	2			1	2	1	2	1	1							1(16)		LQFP64
	GD32F101R6T6	56	32K	6K	up to 51	2			1	2	1	2	1	1							1(16)		LQFP64
	GD32F101R8T6	56	64K	10K	up to 51	3			1	2	1	3	2	2							1(16)		LQFP64
	GD32F101RBT6	56	128K	16K	up to 51	3			1	2	1	3	2	2							1(16)		LQFP64
	GD32F101RCT6	56	256K	32K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RDT6	56	384K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RET6	56	512K	48K	up to 51	4		2	1	2	1	5	2	3							1(16)		LQFP64
	GD32F101RFT6	56	768K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RGT6	56	1024K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RIT6	56	2048K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101RKT6	56	3072K	80K	up to 51	10		2	1	2	1	5	2	3							2(16)		LQFP64
	GD32F101V8T6	56	64K	10K	up to 80	3			1	2	1	3	2	2						•	1(16)		LQFP100
	GD32F101VBT6	56	128K	16K	up to 80	3			1	2	1	3	2	2						•	1(16)		LQFP100
	GD32F101VCT6	56	256K	32K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VDT6	56	384K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VET6	56	512K	48K	up to 80	4		2	1	2	1	5	2	3						•	1(16)		LQFP100
	GD32F101VFT6	56	768K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VGT6	56	1024K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VIT6	56	2048K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101VKT6	56	3072K	80K	up to 80	10		2	1	2	1	5	2	3						•	2(16)		LQFP100
	GD32F101ZCT6	56	256K	32K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZDT6	56	384K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZET6	56	512K	48K	up to 112	4		2	1	2	1	5	2	3						•	1(16)		LQFP144
	GD32F101ZFT6	56	768K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZGT6	56	1024K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZIT6	56	2048K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144
	GD32F101ZKT6	56	3072K	80K	up to 112	10		2	1	2	1	5	2	3						•	2(16)		LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32F103	GD32F103T4U6	108	16K	6K	up to 26	2	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103T6U6	108	32K	10K	up to 26	2	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103T8U6	108	64K	20K	up to 26	3	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103TBU6	108	128K	20K	up to 26	3	1		1	2	1	2	1	1	1	1					2(10)		QFN36
	GD32F103C4T6	108	16K	6K	up to 37	2	1		1	2	1	2	1	1	1	1					2(10)		LQFP48
	GD32F103C6T6	108	32K	10K	up to 37	2	1		1	2	1	2	1	1	1	1					2(10)		LQFP48
	GD32F103C8T6	108	64K	20K	up to 37	3	1		1	2	1	3	2	2	1	1					2(10)		LQFP48
	GD32F103CBT6	108	128K	20K	up to 37	3	1		1	2	1	3	2	2	1	1					2(10)		LQFP48
	GD32F103R4T6	108	16K	6K	up to 51	2	1		1	2	1	2	1	1	1	1					2(16)		LQFP64
	GD32F103R6T6	108	32K	10K	up to 51	2	1		1	2	1	2	1	1	1	1					2(16)		LQFP64
	GD32F103R8T6	108	64K	20K	up to 51	3	1		1	2	1	3	2	2	1	1					2(16)		LQFP64
	GD32F103RBT6	108	128K	20K	up to 51	3	1		1	2	1	3	2	2	1	1					2(16)		LQFP64
	GD32F103RCT6	108	256K	48K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RDT6	108	384K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RET6	108	512K	64K	up to 51	4	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RFT6	108	768K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RGT6	108	1024K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RIT6	108	2048K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103RKT6	108	3072K	96K	up to 51	10	2	2	1	2	1	5	2	3	1	1	2	1			3(16)	2	LQFP64
	GD32F103V8T6	108	64K	20K	up to 80	3	1		1	2	1	3	2	2	1	1				•	2(16)		LQFP100
	GD32F103VBT6	108	128K	20K	up to 80	3	1		1	2	1	3	2	2	1	1				•	2(16)		LQFP100
	GD32F103VCT6	108	256K	48K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VDT6	108	384K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VET6	108	512K	64K	up to 80	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VFT6	108	768K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VGT6	108	1024K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VIT6	108	2048K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103VKT6	108	3072K	96K	up to 80	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(16)	2	LQFP100
	GD32F103ZCT6	108	256K	48K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZDT6	108	384K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZET6	108	512K	64K	up to 112	4	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZFT6	108	768K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZGT6	108	1024K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZIT6	108	2048K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144
	GD32F103ZKT6	108	3072K	96K	up to 112	10	2	2	1	2	1	5	2	3	1	1	2	1		•	3(21)	2	LQFP144

Main-Stream MCU

GD32F10x Series 32-bit Arm® Cortex®-M3 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32F105	GD32F105R8T6	108	64K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RBT6	108	128K	64K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RCT6	108	256K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RDT6	108	384K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RET6	108	512K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RFT6	108	768K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105RGT6	108	1024K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32F105V8T6	108	64K	64K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VBT6	108	128K	64K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VCT6	108	256K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VDT6	108	384K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VET6	108	512K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VFT6	108	768K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105VGT6	108	1024K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32F105ZCT6	108	256K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F105ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F105ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F105ZFT6	108	768K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
	GD32F105ZGT6	108	1024K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2			•	2(16)	2	LQFP144
GD32F107	GD32F107RBT6	108	128K	96K	up to 51	4	1	2	1	2	1	5	1	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107RCT6	108	256K	96K	up to 51	4	1	2	1	2	1	5	1	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107RDT6	108	384K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107RET6	108	512K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107RFT6	108	768K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107RGT6	108	1024K	96K	up to 51	4	1	2	1	2	1	5	2	3	2	OTG	2	•			2(16)	2	LQFP64
	GD32F107VBT6	108	128K	96K	up to 80	4	1	2	1	2	1	5	1	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107VCT6	108	256K	96K	up to 80	4	1	2	1	2	1	5	1	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107VDT6	108	384K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107VET6	108	512K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107VFT6	108	768K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107VGT6	108	1024K	96K	up to 80	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP100
	GD32F107ZCT6	108	256K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP144
	GD32F107ZDT6	108	384K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP144
	GD32F107ZET6	108	512K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP144
	GD32F107ZFT6	108	768K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP144
	GD32F107ZGT6	108	1024K	96K	up to 112	4	1	2	1	2	1	5	2	3	2	OTG	2	•	•		2(16)	2	LQFP144

Main-Stream MCU

GD32E1/C1 Series 32-bit Arm® Cortex®-M4 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32E103	GD32E103T8U6	120	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E103TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E103C8T6	120	64K	20K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E103CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E103R8T6	120	64K	20K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E103RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E103V8T6	120	64K	20K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
	GD32E103VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
GD32C103	GD32C103TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2 x FD	OTG					2(10)	2	QFN36
	GD32C103CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3	2 x FD	OTG	2				2(10)	2	LQFP48
	GD32C103RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2				2(16)	2	LQFP64
	GD32C103VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2			•	2(16)	2	LQFP100
GD32E113	GD32E113T8U6	120	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E113TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1		OTG					2(10)	2	QFN36
	GD32E113C8T6	120	64K	20K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E113CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3		OTG	2				2(10)	2	LQFP48
	GD32E113R8T6	120	64K	20K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E113RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3		OTG	2				2(16)	2	LQFP64
	GD32E113V8T6	120	64K	20K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
	GD32E113VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3		OTG	2			•	2(16)	2	LQFP100
GD32C113	GD32C113TBU6	120	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2 x FD	OTG					2(10)	2	QFN36
	GD32C113CBT6	120	128K	32K	up to 37	10	1	2	1	2	1	3+0	2	3	2 x FD	OTG	2				2(10)	2	LQFP48
	GD32C113RBT6	120	128K	32K	up to 51	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2				2(16)	2	LQFP64
	GD32C113VBT6	120	128K	32K	up to 80	10	2	2	1	2	1	3+2	2	3	2 x FD	OTG	2			•	2(16)	2	LQFP100

Main-Stream MCU

GD32VF103 Series 32-bit RISC-V Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity								EXMC	Analog Interface		Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	I²C	SPI	CAN 2.0B	USB 2.0 FS	I²S	SDIO	Ether-net		12bit ADC Units (CHs)	12bit DAC Units	
GD32VF103	GD32VF103T4U6	108	16K	6K	up to 26	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103T6U6	108	32K	10K	up to 26	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103T8U6	108	64K	20K	up to 26	4	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103TBU6	108	128K	32K	up to 26	4	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	QFN36
	GD32VF103C4T6	108	16K	6K	up to 37	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	LQFP48
	GD32VF103C6T6	108	32K	10K	up to 37	2	1	2	1	2	1	2+0	1	1	2	OTG					2(10)	2	LQFP48
	GD32VF103C8T6	108	64K	20K	up to 37	4	1	2	1	2	1	3+0	2	3	2	OTG	2				2(10)	2	LQFP48
	GD32VF103CBT6	108	128K	32K	up to 37	4	1	2	1	2	1	3+0	2	3	2	OTG	2				2(10)	2	LQFP48
	GD32VF103R4T6	108	16K	6K	up to 51	2	1	2	1	2	1	2+0	1	1	2	OTG					2(16)	2	LQFP64
	GD32VF103R6T6	108	32K	10K	up to 51	2	1	2	1	2	1	2+0	1	1	2	OTG					2(16)	2	LQFP64
	GD32VF103R8T6	108	64K	20K	up to 51	4	1	2	1	2	1	3+2	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32VF103RBT6	108	128K	32K	up to 51	4	1	2	1	2	1	3+2	2	3	2	OTG	2				2(16)	2	LQFP64
	GD32VF103V8T6	108	64K	20K	up to 80	4	1	2	1	2	1	3+2	2	3	2	OTG	2			•	2(16)	2	LQFP100
	GD32VF103VBT6	108	128K	32K	up to 80	4	1	2	1	2	1	3+2	2	3	2	OTG	2			•	2(16)	2	LQFP100

Main-Stream MCU

GD32E502 Series 32-bit Arm® Cortex®-M33 Main-Stream MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity							Analog Interface		Package
			Flash	SRAM	Data-Flash /EEPROM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART /LIN	I^2C	SPI	CAN 2.0B	I^2S	COMP	MFCOM	12bit ADC Units (CHs)	12bit DAC Units	
GD32E502	GD32E502KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32E502KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32E502CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32E502CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32E502RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32E502VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32E502VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32E502KBU7	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32E502KCU7	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32E502CBT7	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32E502CCT7	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32E502RBT7	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502RCT7	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502RDT7	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32E502VBT7	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32E502VCT7	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32E502VDT7	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100

Entry-Level MCU

GD32C2x1 Series 32-bit Arm® Cortex®-M23 Entry-Level MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer					Connectivity					Analog Interface	Package
			Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	SysTick (24bit)	WDG	RTC	U(S)ART	I^2C	SPI	I^2S	COMP	12bit ADC Units(CHs)	
GD32C231	GD32C231C6T6	48	32K	12K	45	4	1	1	2	1	3	2	2	1	2	1(13)	LQFP48
	GD32C231C8T6	48	64K	12K	45	4	1	1	2	1	3	2	2	1	2	1(13)	LQFP48
	GD32C231C6U6	48	32K	12K	45	4	1	1	2	1	3	2	2	1	2	1(13)	QFN48
	GD32C231C8U6	48	64K	12K	45	4	1	1	2	1	3	2	2	1	2	1(13)	QFN48
	GD32C231K6T6	48	32K	12K	30	4	1	1	2	1	3	2	2	1	2	1(12)	LQFP32
	GD32C231K8T6	48	64K	12K	30	4	1	1	2	1	3	2	2	1	2	1(12)	LQFP32
	GD32C231K6U6	48	32K	12K	30	4	1	1	2	1	3	2	2	1	2	1(12)	QFN32
	GD32C231K8U6	48	64K	12K	30	4	1	1	2	1	3	2	2	1	2	1(12)	QFN32
	GD32C231G6U6TR	48	32K	12K	26	4	1	1	2	1	2	2	2	1	2	1(11)	QFN28
	GD32C231G8U6TR	48	64K	12K	26	4	1	1	2	1	2	2	2	1	2	1(11)	QFN28
	GD32C231E8Z6TR	48	64K	12K	23	4	1	1	2	1	2	2	2	1	2	1(9)	FO-PLCSP25
	GD32C231F6P6TR	48	32K	12K	18	4	1	1	2	1	2	2	2	1	2	1(9)	TSSOP20
	GD32C231F8P6TR	48	64K	12K	18	4	1	1	2	1	2	2	2	1	2	1(9)	TSSOP20
	GD32C231F6V6TR	48	32K	12K	18	4	1	1	2	1	2	2	2	1	2	1(9)	LGA20
	GD32C231F8V6TR	48	64K	12K	18	4	1	1	2	1	2	2	2	1	2	1(9)	LGA20

Entry-Level MCU

GD32E23x Series 32-bit Arm® Cortex®-M23 Entry-Level MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer						Connectivity							Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART	I²C	SPI	USB 2.0 FS	I²S	Comp	OP-AMP	12bit ADC Units (CHs)	12bit DAC Units	
GD32E235	GD32E235F4P6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		TSSOP20
	GD32E235F6P6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		TSSOP20
	GD32E235F8P6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		TSSOP20
	GD32E235F4V6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		LGA20
	GD32E235F6V6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		LGA20
	GD32E235F8V6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		LGA20
	GD32E235E8P6TR	72	64K	8K	up to 19		4	1	1	1	2	1	2	2	2		1	1		1(10)		TSSOP24
	GD32E235G4U6TR	72	16K	4K	up to 23		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN28
	GD32E235G6U6TR	72	32K	6K	up to 23		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN28
	GD32E235G8U6TR	72	64K	8K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E235GBU7TR	72	128K	16K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E235K4U6	72	16K	4K	up to 27		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN32
	GD32E235K6U6	72	32K	6K	up to 27		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN32
	GD32E235K8U6	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235K8U7	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235KBU6	72	128K	16K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E235K4T6	72	16K	4K	up to 25		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP32
	GD32E235K6T6	72	32K	6K	up to 25		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP32
	GD32E235K8T6	72	64K	8K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E235KBT6	72	128K	16K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E235CBO6	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN48
	GD32E235C4T6	72	16K	4K	up to 39		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP48
	GD32E235C6T6	72	32K	6K	up to 39		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP48
	GD32E235C8T6	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235C8T7	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235CBT6	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
	GD32E235CBT7	72	128K	16K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48
GD32E230	GD32E230F4P6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		TSSOP20
	GD32E230F6P6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		TSSOP20
	GD32E230F8P6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		TSSOP20
	GD32E230F4V6TR	72	16K	4K	up to 15		4	1	1	1	2	1	1	1	1		1	1		1(9)		LGA20
	GD32E230F6V6TR	72	32K	6K	up to 15		4	1	1	1	2	1	2	1	1		1	1		1(9)		LGA20
	GD32E230F8V6TR	72	64K	8K	up to 15		4	1	1	1	2	1	2	2	2		1	1		1(9)		LGA20
	GD32E230E8P6TR	72	64K	8K	up to 19		4	1	1	1	2	1	2	2	2		1	1		1(10)		TSSOP24
	GD32E230G4U6TR	72	16K	4K	up to 23		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN28
	GD32E230G6U6TR	72	32K	6K	up to 23		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN28
	GD32E230G8U6TR	72	64K	8K	up to 23		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN28
	GD32E230K4U6	72	16K	4K	up to 27		4	1	1	1	2	1	1	1	1		1	1		1(10)		QFN32
	GD32E230K6U6	72	32K	6K	up to 27		4	1	1	1	2	1	2	1	1		1	1		1(10)		QFN32
	GD32E230K8U6	72	64K	8K	up to 27		5	1	1	1	2	1	2	2	2		1	1		1(10)		QFN32
	GD32E230K4T6	72	16K	4K	up to 25		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP32
	GD32E230K6T6	72	32K	6K	up to 25		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP32
	GD32E230K8T6	72	64K	8K	up to 25		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP32
	GD32E230C4T6	72	16K	4K	up to 39		4	1	1	1	2	1	1	1	1		1	1		1(10)		LQFP48
	GD32E230C6T6	72	32K	6K	up to 39		4	1	1	1	2	1	2	1	1		1	1		1(10)		LQFP48
	GD32E230C8T6	72	64K	8K	up to 39		5	1	1	1	2	1	2	2	2		1	1		1(10)		LQFP48

Entry-Level MCU

GD32F3x0 Series 32-bit Arm® Cortex®-M4 Entry-Level MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity							Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART	I²C	SPI	USB 2.0 FS	I²S	CEC	Comp	12bit ADC Units (CHs)	12bit DAC Units	
GD32F310	GD32F310F4P6TR	72	16K	4K	up to 15		4	1		1	2	1	1	1	1		1			1(9)		TSSOP20
	GD32F310F6P6TR	72	32K	6K	up to 15		4	1		1	2	1	2	1	1		1			1(9)		TSSOP20
	GD32F310F8P6TR	72	64K	8K	up to 15		4	1		1	2	1	2	2	2		1			1(9)		TSSOP20
	GD32F310G8U6TR	72	64K	8K	up to 23		5	1		1	2	1	2	2	2		1			1(10)		QFN28
	GD32F310K8U6	72	64K	8K	up to 27		5	1		1	2	1	2	2	2		1			1(10)		QFN32
	GD32F310K6T6	72	32K	6K	up to 25		4	1		1	2	1	2	1	1		1			1(10)		LQFP32
	GD32F310K8T6	72	64K	8K	up to 25		5	1		1	2	1	2	2	2		1			1(10)		LQFP32
	GD32F310C8T6	72	64K	8K	up to 39		5	1		1	2	1	2	2	2		1			1(10)		LQFP48
	GD32F310CBT6	72	128K	16K	up to 39		5	1		1	2	1	2	2	2		1			1(10)		LQFP48
GD32F330	GD32F330F4P6TR	84	16K	4K	up to 15	1	4	1		1	2	1	1	1	1					1(9)		TSSOP20
	GD32F330F6P6TR	84	32K	4K	up to 15	1	4	1		1	2	1	2	1	1					1(9)		TSSOP20
	GD32F330F8P6TR	84	64K	8K	up to 15	1	4	1		1	2	1	2	2	2					1(9)		TSSOP20
	GD32F330G4U6TR	84	16K	4K	up to 23	1	4	1		1	2	1	1	1	1					1(10)		QFN28
	GD32F330G6U6TR	84	32K	4K	up to 23	1	4	1		1	2	1	2	1	1					1(10)		QFN28
	GD32F330G8U6TR	84	64K	8K	up to 23	1	5	1		1	2	1	2	2	2					1(10)		QFN28
	GD32F330K4U6	84	16K	4K	up to 27	1	4	1		1	2	1	1	1	1					1(10)		QFN32
	GD32F330K6U6	84	32K	4K	up to 27	1	4	1		1	2	1	2	1	1					1(10)		QFN32
	GD32F330K8U6	84	64K	8K	up to 27	1	5	1		1	2	1	2	2	2					1(10)		QFN32
	GD32F330K4T6	84	16K	4K	up to 25	1	4	1		1	2	1	1	1	1					1(10)		LQFP32
	GD32F330K6T6	84	32K	4K	up to 25	1	4	1		1	2	1	2	1	1					1(10)		LQFP32
	GD32F330K8T6	84	64K	8K	up to 25	1	5	1		1	2	1	2	2	2					1(10)		LQFP32
	GD32F330C4T6	84	16K	4K	up to 39	1	4	1		1	2	1	1	1	1					1(10)		LQFP48
	GD32F330C6T6	84	32K	4K	up to 39	1	4	1		1	2	1	2	1	1					1(10)		LQFP48
	GD32F330C8T6	84	64K	8K	up to 39	1	5	1		1	2	1	2	2	2					1(10)		LQFP48
	GD32F330CBT6	84	128K	16K	up to 39	1	5	1		1	2	1	2	2	2					1(10)		LQFP48
	GD32F330R8T6	84	64K	16K	up to 55	1	5	1		1	2	1	2	2	2					1(16)		LQFP64
	GD32F330RBT6	84	128K	16K	up to 55	1	5	1		1	2	1	2	2	2					1(16)		LQFP64
GD32F350	GD32F350G4U6TR	108	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	QFN28
	GD32F350G6U6TR	108	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	QFN28
	GD32F350G8U6TR	108	64K	8K	up to 24	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	QFN28
	GD32F350K4U6	108	16K	4K	up to 27	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	QFN32
	GD32F350K6U6	108	32K	6K	up to 27	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	QFN32
	GD32F350K8U6	108	64K	8K	up to 27	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	QFN32
	GD32F350C4T6	108	16K	4K	up to 39	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(10)	1	LQFP48
	GD32F350C6T6	108	32K	6K	up to 39	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(10)	1	LQFP48
	GD32F350C8T6	108	64K	8K	up to 39	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	LQFP48
	GD32F350CBT6	108	128K	16K	up to 39	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(10)	1	LQFP48
	GD32F350R4T6	108	16K	4K	up to 55	1	5	1	1	1	2	1	1	1	1	OTG	1	1	2	1(16)	1	LQFP64
	GD32F350R6T6	108	32K	8K	up to 55	1	5	1	1	1	2	1	2	1	1	OTG	1	1	2	1(16)	1	LQFP64
	GD32F350R8T6	108	64K	16K	up to 55	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(16)	1	LQFP64
	GD32F350RBT6	108	128K	16K	up to 55	1	5	1	1	1	2	1	2	2	2	OTG	1	1	2	1(16)	1	LQFP64

Entry-Level MCU

GD32F1x0 Series 32-bit Arm® Cortex®-M3 Entry-Level MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity						Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART	I²C	SPI	USB 2.0 FS	I²S	CEC	12bit ADC Units (CHs)	12bit DAC Units	
GD32F130	GD32F130F4P6TR	48	16K	4K	up to 15	1	4		1	1	2	1	1	1	1				1(9)		TSSOP20
	GD32F130F6P6TR	48	32K	4K	up to 15	1	4		1	1	2	1	2	1	1				1(9)		TSSOP20
	GD32F130F8P6TR	48	64K	8K	up to 15	1	4		1	1	2	1	2	2	2				1(9)		TSSOP20
	GD32F130G4U6TR	48	16K	4K	up to 23	1	4		1	1	2	1	1	1	1				1(10)		QFN28
	GD32F130G6U6TR	48	32K	4K	up to 23	1	4		1	1	2	1	2	1	1				1(10)		QFN28
	GD32F130G8U6TR	48	64K	8K	up to 23	1	5		1	1	2	1	2	2	2				1(10)		QFN28
	GD32F130K4T6	48	16K	4K	up to 27	1	4		1	1	2	1	1	1	1				1(10)		LQFP32
	GD32F130K6T6	48	32K	4K	up to 27	1	4		1	1	2	1	2	1	1				1(10)		LQFP32
	GD32F130K8T6	48	64K	8K	up to 27	1	5		1	1	2	1	2	2	2				1(10)		LQFP32
	GD32F130K4U6	48	16K	4K	up to 27	1	4		1	1	2	1	1	1	1				1(10)		QFN32
	GD32F130K6U6	48	32K	4K	up to 27	1	4		1	1	2	1	2	1	1				1(10)		QFN32
	GD32F130K8U6	48	64K	8K	up to 27	1	5		1	1	2	1	2	2	2				1(10)		QFN32
	GD32F130C4T6	48	16K	4K	up to 39	1	4		1	1	2	1	1	1	1				1(10)		LQFP48
	GD32F130C6T6	48	32K	4K	up to 39	1	4		1	1	2	1	2	1	1				1(10)		LQFP48
	GD32F130C8T6	48	64K	8K	up to 39	1	5		1	1	2	1	2	2	2				1(10)		LQFP48
	GD32F130R8T6	48	64K	8K	up to 55	1	5		1	1	2	1	2	2	2				1(16)		LQFP64
GD32F150	GD32F150G4U6TR	72	16K	4K	up to 24	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	QFN28
	GD32F150G6U6TR	72	32K	6K	up to 24	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	QFN28
	GD32F150G8U6TR	72	64K	8K	up to 24	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	QFN28
	GD32F150K4U6	72	16K	4K	up to 27	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	QFN32
	GD32F150K6U6	72	32K	6K	up to 27	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	QFN32
	GD32F150K8U6	72	64K	8K	up to 27	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	QFN32
	GD32F150C4T6	72	16K	4K	up to 39	1	5	1	1	1	2	1	1	1	1	1	1	1	1(10)	1	LQFP48
	GD32F150C6T6	72	32K	6K	up to 39	1	5	1	1	1	2	1	2	1	1	1	1	1	1(10)	1	LQFP48
	GD32F150C8T6	72	64K	8K	up to 39	1	5	1	1	1	2	1	2	2	2	1	1	1	1(10)	1	LQFP48
	GD32F150R4T6	72	16K	4K	up to 55	1	5	1	1	1	2	1	1	1	1	1	1	1	1(16)	1	LQFP64
	GD32F150R6T6	72	32K	6K	up to 55	1	5	1	1	1	2	1	2	1	1	1	1	1	1(16)	1	LQFP64
	GD32F150R8T6	72	64K	8K	up to 55	1	5	1	1	1	2	1	2	2	2	1	1	1	1(16)	1	LQFP64

Low-Power Consumption MCU

GD32L23x Series 32-bit Arm® Cortex®-M23 Low-Power Consumption MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer								Connectivity									Analog Interface		Package
			Flash	SRAM		LPTM (32bit)	LPTM (16bit)	GPTM (16bit)	Advanced TM(16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART +UART	LP UART	I²C	SPI	USB 2.0	CAN2.0B	I²S	Comp	Segment LCD	12bit ADC Units (CHs)	12bit DAC Units	
GD32L235	GD32L235E8Y6TR	64	64K	12K	up to 23		2	5	1	2	1	2	1	2+1	2	3	2		1	1	2		1(10)	1	WLCSP25
	GD32L235EBY6TR	64	128K	24K	up to 23		2	6	1	2	1	2	1	2+2	2	3	2		1	1	2		1(10)	1	WLCSP25
	GD32L235K8Q6	64	64K	12K	up to 29		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN32
	GD32L235KBQ6	64	128K	24K	up to 29		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN32
	GD32L235K8Q6P	64	64K	12K	up to 28		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN32
	GD32L235KBQ6P	64	128K	24K	up to 28		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN32
	GD32L235K8T6	64	64K	12K	up to 27		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	LQFP32
	GD32L235KBT6	64	128K	24K	up to 27		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	LQFP32
	GD32L235C8O6	64	64K	12K	up to 43		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	QFN48
	GD32L235CBO6	64	128K	24K	up to 43		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	QFN48
	GD32L235C8T6	64	64K	12K	up to 43		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2		1(10)	1	LQFP48
	GD32L235CBT6	64	128K	24K	up to 43		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2		1(10)	1	LQFP48
	GD32L235R8O6	64	64K	12K	up to 59		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	QFN64
	GD32L235RBO6	64	128K	24K	up to 59		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	QFN64
	GD32L235R8T6	64	64K	12K	up to 59		2	5	1	2	1	2	1	2+1	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	LQFP64
	GD32L235RBT6	64	128K	24K	up to 59		2	6	1	2	1	2	1	2+2	2	3	2	FS	1	1	2	8*28/4*32	1(16)	1	LQFP64
GD32L233	GD32L233K8Q6	64	64K	16K	up to 29	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	QFN32
	GD32L233KBQ6	64	128K	24K	up to 29	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	QFN32
	GD32L233K8T6	64	64K	16K	up to 27	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP32
	GD32L233KBT6	64	128K	24K	up to 27	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP32
	GD32L233C8T6	64	64K	16K	up to 43	1		3	0	2	1	2	1	2+1	1	2	2	FS		1	2		1(10)	1	LQFP48
	GD32L233CBT6	64	128K	24K	up to 43	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	LQFP48
	GD32L233CCT6	64	256K	32K	up to 43	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	LQFP48
	GD32L233CCY6TR	64	256K	32K	up to 39	1		4	0	2	1	2	1	2+2	1	2	2	FS		1	2		1(10)	1	WLCSP49
	GD32L233RCO6	64	256K	32K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	QFN64
	GD32L233R8T6	64	64K	16K	up to 59	1		3	0	2	1	2	1	2+1	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64
	GD32L233RBT6	64	128K	24K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64
	GD32L233RCT6	64	256K	32K	up to 59	1		4	0	2	1	2	1	2+2	1	3	2	FS		1	2	8*28/4*32	1(16)	1	LQFP64

Wireless MCU

GD32VW553 Series 32-bit RISC-V Wireless MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity												Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (64bit)	WDG	RTC	U(S)ART	I^2C	SPI	USB 2.0 FS	I^2S	QSPI	CAU	HAU	PKCAU	TRNG	IEEE 802.11	Bluetooth	12bit ADC Units (CHs)	12bit DAC Units	
GD32VW553	GD32VW553KIQ7	160	2048K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32
	GD32VW553KMQ7	160	4096K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32
	GD32VW553HIQ7	160	2048K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40
	GD32VW553HMQ7	160	4096K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40
	GD32VW553KIQ6	160	2048K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32
	GD32VW553KMQ6	160	4096K	320K	up to 21	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN32
	GD32VW553HIQ6	160	2048K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40
	GD32VW553HMQ6	160	4096K	320K	up to 28	2	2	1	1	1	2	1	1+2	2	1			1	•	•	•	•	(b/g/n/ax) HE20	BLE 5.2	1(9)		QFN40

GD32W515 Series 32-bit Arm® Cortex®-M33 Wireless MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)		I/O	Timer							Connectivity											Analog Interface		Package
			Flash	SRAM		GPTM (32bit)	GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART	I^2C	SPI	USB 2.0 FS	I^2S	SDIO	IEEE 802.11	QSPI	Digital filters	Digital Camera	HW Security	12bit ADC Units (CHs)	Cap.Touch Key	
GD32W515	GD32W515TGQ6	180	1024K	384K	up to 25	2	3	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1			•	1(5)	7	QFN36
	GD32W515TIQ6	180	2048K	448K	up to 25	2	3	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1			•	1(5)	7	QFN36
	GD32W515P0Q6	180	0K	448K	up to 43	2	4	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1	•	•	•	1(9)	12	QFN56
	GD32W515PIQ6	180	2048K	448K	up to 43	2	4	1	1	1	2	1	3	2	2	OTG	1	1	b/g/n	1	•	•	•	1(9)	12	QFN56

Automotive MCU

GD32A7 Series 32-bit Arm® Cortex®-M7 Automotive MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Core Type	Memory (Bytes)			I/O	Timer						Connectivity									Analog Interface				Functional Safety	Security	Supply Voltage (V)	Temperature Range(TA)	Package
				Flash	Data-Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (32bit)	SysTick (24bit)	WDG	RTC	USART->UART	I²C	SPI	QSPI	CAN-FD	LIN	Ethernet	MFCOM	SENT	12bit ADC Units	12bit ADC Channels	COMP	12bit DAC Units					
GD32A711	GD32A711ART3TB	160	Cortex-M7	1024K	128K+96K	128K	Up to 54	1	8	2	1	2	1	Up to 6	2	4	0	7	Up to 6	0	0	0	2	27	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP64
	GD32A711AVT3TB	160	Cortex-M7	1024K	128K+96K	128K	Up to 83	1	8	2	1	2	1	Up to 6	2	6	1	8	Up to 6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A711AZT3TB	160	Cortex-M7	1024K	128K+96K	128K	Up to 113	2	8	2	1	2	1	Up to 6	2	6	1	8	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A711BRT3TB	120	Cortex-M7	1024K	128K+96K	128K	Up to 54	1	8	2	1	2	1	Up to 6	2	4	0	5	Up to 6	0	0	0	2	27	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP64
	GD32A711BVT3TB	120	Cortex-M7	1024K	128K+96K	128K	Up to 83	1	8	2	1	2	1	Up to 6	2	6	1	6	Up to 6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A711BZT3TB	120	Cortex-M7	1024K	128K+96K	128K	Up to 113	2	8	2	1	2	1	Up to 6	2	6	1	6	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
GD32A712	GD32A712AVT3TB	160	Cortex-M7	2048K	128K+96K	256K	Up to 83	1	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A712AZT3TB	160	Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A712AIT3TB	160	Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A712BVT3TB	120	Cortex-M7	2048K	128K+96K	256K	Up to 83	1	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A712BZT3TB	120	Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A712BIT3TB	120	Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	1	2	1	Up to 6	2	6	2	8	Up to 6	0	0	0	2	48	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176

Series	Part No.	Max Speed (MHz)	Core Type	Memory (Bytes)			I/O	Timer						Connectivity										Analog Interface				Functional Safety	Security	Supply Voltage (V)	Temperature Range(TA)	Package
				Flash	Data-Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (32bit)	SysTick (24bit)	WDG	RTC	USART->UART	I²C	SPI	I²S	QSPI	CAN-FD	LIN	Ethernet	MFCOM	SENT	12bit ADC Units	12bit ADC Channels	12bit DAC Units	COMP					
GD32A714	GD32A714AVT3TB	320	Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	12	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A714AZT3TB	320	Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A714AIT3TB	320	Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A714AXJ3TB	320	Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
	GD32A714BVT3TB	160	Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	12	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A714BZT3TB	160	Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A714BIT3TB	160	Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A714BXJ3TB	160	Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-Full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
GD32A722	GD32A722AZT3TB	320	Dual Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A722AIT3TB	320	Dual Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A722AXJ3TB	320	Dual Cortex-M7	2048K	128K+96K	256K	Up to 216	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
	GD32A722BZT3TB	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A722BIT3TB	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A722BXJ3TB	160	Dual Cortex-M7	2048K	128K+96K	256K	Up to 216	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257

Automotive MCU

GD32A7 Series 32-bit Arm® Cortex®-M7 Automotive MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Core Type	Memory (Bytes)			I/O	Timer						Connectivity										Analog Interface				Functional Safety	Security	Supply Voltage (V)	Temperature Range(TA)	Package
				Flash	Data-Flash	SRAM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (32bit)	SysTick (24bit)	WDG	RTC	USART->UART	I²C	SPI	I²S	QSPI	CAN-FD	LIN	Ethernet	MFCOM	SENT	12bit ADC Units	12bit ADC Channels	12bit DAC Units	COMP					
GD32A724	GD32A724AZT3TB	320	Dual Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A724AIT3TB	320	Dual Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A724AXJ3TB	320	Dual Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	2	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
	GD32A724BZT3TB	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A724BIT3TB	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A724BXJ3TB	160	Dual Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	2	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-B	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
GD32A741	GD32A741AVT3TB	320	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	12	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A741AZT3TB	320	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A741AIT3TB	320	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A741BVT3TB	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	8	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A741BZT3TB	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A741BIT3TB	160	Lockstep Cortex-M7	1024K	128K+96K	128K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
GD32A742	GD32A742AVT3TB	320	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	12	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A742AZT3TB	320	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A742AIT3TB	320	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A742BVT3TB	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	8	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A742BZT3TB	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A742BIT3TB	160	Lockstep Cortex-M7	2048K	128K+96K	256K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
GD32A744	GD32A744AVT3TB	320	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	12	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A744AZT3TB	320	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A744AIT3TB	320	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A744AXJ3TB	320	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	1	4	1	Up to 14	4	8	4	1	12	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257
	GD32A744BVT3TB	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 80	2	8	2	1	4	1	Up to 12	4	8	4	1	8	Up to 12	1	1	6	3	40	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP100
	GD32A744BZT3TB	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 113	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	54	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP144
	GD32A744BIT3TB	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 144	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	LQFP176
	GD32A744BXJ3TB	160	Lockstep Cortex-M7	4096K	128K+96K	512K	Up to 216	2	8	2	1	4	1	Up to 14	4	8	4	1	8	Up to 14	1	1	6	3	72	2	2	ISO26262 ASIL-D	Evita-full+SM2/3/4	2.97~5.5	-40~125℃	BGA257

Automotive MCU

GD32A5 Series 32-bit Arm® Cortex®-M33 Automotive MCU Selection Guide

Series	Part No.	Max Speed (MHz)	Memory (Bytes)			I/O	Timer						Connectivity							Analog Interface		Package
			Flash	SRAM	Data-Flash/ EEPROM		GPTM (16bit)	Advanced TM (16bit)	Basic TM (16bit)	SysTick (24bit)	WDG	RTC	USART / LIN	I²C	SPI	CAN 2.0B	I²S	COMP	MFCOM	12bit ADC Units (CHs)	12bit DAC Units	
GD32A503	GD32A503KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A503KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A503CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A503CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A503RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A503VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A503VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A503VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
GD32A513	GD32A513KBU3	100	128K	24K	32K/2K	up to 27	1	3	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A513KCU3	100	256K	32K	64K/4K	up to 27	1	4	2	1	2	1	1	2	1	1xFD	0	1	1	2(12)	1	QFN32
	GD32A513CBT3	100	128K	24K	32K/2K	up to 42	1	3	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A513CCT3	100	256K	32K	64K/4K	up to 42	1	4	2	1	2	1	2	2	2	2xFD	1	1	1	2(20)	1	LQFP48
	GD32A513RBT3	100	128K	24K	32K/2K	up to 57	1	3	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513RCT3	100	256K	32K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513RDT3	100	384K	48K	64K/4K	up to 57	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(27)	1	LQFP64
	GD32A513VBT3	100	128K	24K	32K/2K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A513VCT3	100	256K	32K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100
	GD32A513VDT3	100	384K	48K	64K/4K	up to 88	1	4	2	1	2	1	3	2	2	2xFD	1	1	1	2(32)	1	LQFP100

GD32 MCU Package Options

LQFP176 (24*24mm)	LQFP144 (20*20mm)	LQFP100 (14*14mm)	LQFP64 (10*10mm)	LQFP48 (7*7mm)
				

LQFP32 (7*7mm)	BGA240 (14*14mm)	BGA176 (10*10mm)	BGA100 (7*7mm)	QFN64 (7*7mm)
				

QFN56 (7*7mm)	QFN48 (7*7mm)	QFN36 (6*6mm)	QFN32 (5*5mm)	QFN32 (4*4mm)

QFN28 (4*4mm)	QFN24 (3*3mm)	QFN20 (3*3mm)	TSSOP24 (7.8*4.4mm)	TSSOP20 (6.5*4.4mm)
				

LGA20 (3*3mm)	WLCSP49 (3*3mm)	WLCSP25 (2*2mm)	SOP8 (4.9*6mm)
			

GD32 Development Ecosystem

Names and brands are the property of their respective owners.

Analog

General Power IC

- Wireless Infrastructure
- Communications / Networking
- Industrial Applications
- IPC
- IoT

Motor Driver

- Robot Vacuums
- IPC
- Printers
- Robots and UAV
- Smart Server Fans
- White Goods / Kitchen Appliances
- Industrial Automation

ASSP Power IC

- DDR5 PMIC
- Power IC for SSD/PC/Sever

Signal Chain

- Smart Grid / Data Acquisition
- Current Sensing / New Energy
- Data Centers / Servers
- Sensors
- Industrial Automation & Instrumentation
- Medical Instruments

Battery Management IC

- Energy Storage
- LEV
- UAV
- Robots
- Wearable Devices

Capacitor Sensitivity

- Electric Toothbrushes
- Smoke Detectors

General Power IC

GD30LD LDO Selection Guide

Part No.	Status	Vin_min (V)	Vin_max (V)	Output Current (A)Max	Vout_min (V)	Vout_max(V)	Ground Current (μA)	PSRR(db)	Dropout Voltage (mV)	Temperature Operating Range (° C)	Package
GD30LD3300FUTR	MP	1.1	6.5	3	0.5	5.2	3000	42@10kHz	180 @ 3A with Bias	-40~125	QFN20
GD30LD3301FUTR	MP	1.1	6.5	3	0.8	5.2	3000	42@10kHz	180 @ 3A with Bias	-40~125	QFN20
GD30LD3137WETR	MP	1.1	6.5	1.2	0.8	5.5	3000	40@500kHz	70 @ 1.2A with Bias	-40~125	DFN8
GD30LD1003FUTY-I	MP	1.1	6.5	2	0.8	5.2	3000	39@500KHz	125 @ 2A with Bias	-40~125	QFN20
GD30LD1030MUTR-I	MP	1.1	6.5	3	0.5	5.2	3000	39@500KHz	180 @ 3A with Bias	-40~125	QFN12
GD30LD1000WGTR-I	MP	1.4	6.5	2	0.5	5.2	3000	39@500KHz	300 @ 2A	-40~125	SOP8
GD30LD1000NBTR-I	MP	1.4	6.5	2	0.5	5.2	3000	39@500KHz	300 @ 2A	-40~125	TO263
GD30LD1001LUTR-I	MP	1.4	6.5	2	0.5	5.2	3000	39@500KHz	180 @ 2A	-40~125	QFN16
GD30LD1002WETR-I	MP	1.4	6.5	1.2	0.5	5.2	3000	39@500KHz	200 @ 2A	-40~125	DFN8
GD30LD1031NBTR-I	MP	1.4	6.5	3	0.5	5.2	3000	-	300 @ 2A	-40~125	TO263
GD30LD2000X	MP	1.9	5.5	0.3	0.8	3.6	0.8	50@1KHz	180 @ 0.2A	-40~125	SOT235/SOT233/DFN 1x1
GD30LD2001X	MP	2.5	5.5	0.3	1.2	5	0.3	60@1KHz	270 @ 0.2A	-40~85	SOT235/SOT233/DFN 1x1
GD30LD2010X	MP	1.5	7	0.5	0.8	5	40	87@1KHz	520 @ 0.2A	-40~125	SOT235/DFN 1x1
GD30LD2011X	MP	1.8	7	0.5	1.2	5	40	80@1KHz	270 @ 0.2A	-40~85	SOT233/DFN 1x1
GD30LD2100X	MP	2.3	10	0.4	1.5	5	2.1	76@1KHz	300 @ 0.2A	-40~85	SOT235/SOT233/DFN 1x1/SOT893
GD30LD2400X	MP	2.5	45	0.35	1.8	5	2.5	60@1KHz	690 @ 0.2A	-40~125	SOT235/SOT233/DFN 1x1/SOT893
GD30LD2401X	MP	2.5	36	0.25	1.8	5	2.5	60@1KHz	690 @ 0.2A	-40~125	SOT235/SOT233/DFN 1x1/SOT893
GD30LD2402X	MP	3	30	0.2	3	5	1.5	40@1KHz	1000/1200 @ 0.2A	-40~125	SOT235/SOT233/SOT893
GD30LD2404X	MP	3	30	0.2	3	5	1.5	40@1KHz	1000 @ 0.2A	-40~125	SOT235/SOT233/SOT893
GD30LD2406X	MP	3	40	0.2	3	5	2.5	70@1KHz	1600 @ 0.2A	-40~125	SOT235/SOT233/SOT893
GD30LD1117X	MP		18	0.8	1.8	5	3500	70@120Hz	1200 @ 0.8A	-40~125	SOT223/SOT89
GD30LD2407X	MP		30	0.15	5	5.1	1300	62@120Hz	1800 @ 0.15A	-40~125	SOT89/TO92

General Power IC

GD30DC DC/DC Converter Selection Guide

Part No.	Status	Function	Supply Voltage (V)Min	Supply Voltage (V)Max	Output Current (A)Max	Ron (mΩ) HSFET	Ron (mΩ) LSFET	Reference Voltage (V)	Quiescent Current (μA)	Switching Frequency (MHz)	Note	Temperature Operating Range (° C)	Package
GD30DC1103NSTR-I	MP	BUCK	2.5	6	1	200	150	0.6	25	1.5	SS/Comp./Current Mode	-40~85	SOT235
GD30DC1107NSTR-I	MP	BUCK	2.5	6	1	200	150	0.6	-	1.5	SS/Comp./Current Mode/FCCM	-40~85	SOT235
GD30DC1103SOTR-I	MP	BUCK	2.5	6	1	200	150	0.6	25	1.5	SS/Comp./Current Mode	-40~85	SOT563
GD30DC1106NSTR-I	MP	BUCK	2.5	6	1.2	200	150	0.6	25	1.5	SS/Comp./Current Mode	-40~85	SOT235
GD30DC1109NSTR-I	MP	BUCK	2.5	6	1.2	200	150	0.6	-	1.5	SS/Comp./Current Mode/FCCM	-40~85	SOT235
GD30DC1104NSTR-I	MP	BUCK	2.7	5.75	2	65	60	0.6	35	1.5	SS/Comp./Current Mode	-40~85	SOT235
GD30DC1108NSTR-I	MP	BUCK	2.7	5.75	2	65	60	0.6	-	1.5	SS/Comp./Current Mode/FCCM	-40~85	SOT235
GD30DC1301SOTR-I	NRFND	BUCK	4.5	18	2	110	60	0.8	250	0.8	ACOT	-40~85	SOT563
GD30DC1301SSTR-I	NRFND	BUCK	4.5	18	2	110	60	0.8	250	0.8	ACOT	-40~85	SOT236
GD30DC1301SOTR-S	NRFND	BUCK	4.5	18	2	110	60	0.8	250	0.8	ACOT	-40~85	SOT563
GD30DC1301SSTR-S	NRFND	BUCK	4.5	18	2	110	60	0.8	250	0.8	ACOT	-40~85	SOT236
GD30DC1307SSTR-I06	MP	BUCK	4.2	18	2	113	80	0.6	250	0.6	ACOT	-40~85	SOT236
GD30DC1307SSTR-I12	MP	BUCK	4.2	18	2	113	80	0.6	250	1.2	ACOT	-40~85	SOT236
GD30DC1300SOTR-I	MP	BUCK	4.5	18	3	80	45	0.8	250	0.8	ACOT	-40~85	SOT563
GD30DC1300SSTR-I	MP	BUCK	4.5	18	3	80	45	0.8	250	0.8	ACOT	-40~85	SOT236
GD30DC1300SOTR-S	MP	BUCK	4.5	18	3	80	45	0.8	250	0.8	ACOT	-40~85	SOT563
GD30DC1300SSTR-S	MP	BUCK	4.5	18	3	80	45	0.8	250	0.8	ACOT	-40~85	SOT236
GD30DC1309ZUTR-I	MP	BUCK	4.5	18	6	21	16	0.6	750	0.2-1.6	SS/Comp./Current Mode/FCCM	-40~150	QFN14
GD30DC1350SSTR-I	NRFND	BUCK	4.5	25	3	50	40	0.6	175	0.5	ACOT	-40~85	SOT236
GD30DC1354SSTR-I	MP	BUCK	4.5	32	2	150	78	0.6	300	0.5	Current Mode	-40~125	SOT236
GD30DC1502WGTR-I	MP	BUCK	4.5	36	3	120	80	0.8	150	0.52	ACOT	-40~125	ESOP8
GD30DC2300SSTR-N	MP	BOOST	2.5	18	-	-	150	0.6	110	1	Current Mode	-20~85	SOT236
GD30DC2301SSTR-N	MP	BOOST	2.5	18	-	-	150	0.2	110	1	Current Mode	-20~85	SOT236
GD30DC2101SSTR-I	MP	BOOST	0.9	5.5	-	600	300	0.5	1	1	Current Mode	-40~125	SOT236
GD30DC2100SSTR-I	MP	BOOST	0.9	5.5	-	600	300	0.5	1	1	Current Mode	-40~125	SOT236
GD30DC1305SOTR-I08	MP	BUCK	4.2	18	2	95	70	0.6	260	0.8	ACOT	-40~85	SOT563
GD30DC1310SSTR-I06	MP	BUCK	4.2	18	2	113	80	0.8	250	0.6	ACOT	-40~85	SOT236
GD30DC1310SOTR-I08	MP	BUCK	4.2	18	2	95	70	0.8	260	0.8	ACOT	-40~85	SOT563
GD30DC1314SSTR-I06	MP	BUCK	4.2	18	2	113	80	0.765	250	0.6	ACOT	-40~85	SOT236
GD30DC1318SSTR-I06	MP	BUCK	4.5	18	3	95	60	0.6	250	0.6	ACOT	-40~85	SOT236
GD30DC1358SSTR-I	MP	BUCK	4.5	36	2	150	78	0.6	300	0.5	Current Mode	-40~125	SOT236
GD30DC135ASSTR-I	MP	BUCK	4.2	28	3	90	40	0.6	130	0.6	ACOT	-40~125	SOT236
GD30DC1601WGTR-I	MP	BUCK	4.5	70	3	180	N/A	0.8	150	0.25-1.2	ACOT	-40~125	ESOP8
GD30DC1601WGTR-S	MP	BUCK	4.5	70	3	180	N/A	0.8	150	0.25-1.2	ACOT	-40~125	ESOP8
GD30DC1602WGTR-I	MP	BUCK	4.5	65	5	80	N/A	0.803	130	0.2-1.2	ACOT	-40~125	ESOP8
GD30DC1802WGTR-I	MP	BUCK	4.5	100	2	600	N/A	0.78	190	0.15/0.24/0.42	ACOT	-40~125	ESOP8
GD30DC1803WGTR-I	MP	BUCK	4.5	100	3.8	500	N/A	0.78	190	0.15/0.24/0.42	ACOT	-40~125	ESOP8
GD30DC1901WGTR-I	MP	BUCK	4.5	100	1	500	200	0.78	220	0.3-0.8	ACOT	-40~125	ESOP8
GD30DC1902WGTR-I	MP	BUCK	4.5	100	2	400	120	0.78	240	0.3-0.8	ACOT	-40~125	ESOP8
GD30DC1801SSTR-I	MP	BUCK	4.5	100	1	900	N/A	0.78	180	0.46	ACOT	-40~125	SOT236

ASSP Power IC

GD30MP DDR PMIC Selection Guide

Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	SW SWA Max Current（A）	SW SWB Max Current（A）	SW SWC Max Current（A）	SW SWD Max Current（A）	LDO 1.8V Current（A）	LDO 1.0V Current（A）	Protection Features（OVP）	Protection Features（UVP）	Protection Features(OCP)	Protection Features(OTP)	Note	Temperature Operating Range (° C)	Package
GD30MP1000GUTR-I05	4.25	5.5	5	5	2	-	25	20	•	•	•	•	PMIC5100	-10~125	WQFN-28L
GD30MP1020GUTR-I	4.25	5.5	6	6	2	-	25	20	•	•	•	•	PMIC5100	-10~125	WQFN-28L
GD30MP1021GUTR-I	4.25	5.5	7	7	2.5	-	25	20	•	•	•	•	PMIC5120	-10~125	WQFN-28L
GD30MP2000TUTR-I	4.25	15	5.5	5.5	5.5	5.5	25	20	•	•	•	•	PMIC5000	-40~125	QFN36

GD30 SPD & Temp. Sensor Selection Guide

Part No.	VDDSPD Supply Voltage (V)	VDDIO Supply Voltage (V)	NVM	Transfer Rate (MHz)	Interface	Temperature accuracy(° C)	Temperature Operating Range (° C)	Package
GD30PD5118WETR-I	1.8V	1.0V	1024 Byte	12.5（Max）	I^2C/I^3C	0.5	-40~125	UDFN6
GD30TS139NSYTR-I	1.8V	1.0V	––	12.5（Max）	I^2C/I^3C	0.5	-40~125	WLCSP-9

GD30PW POL Selection Guide

Part No.	Status	Function	Supply Voltage (V)Min	Supply Voltage (V)Max	Output Current (A)Max	Ron (mΩ) HSFET	Ron (mΩ) LSFET	Reference Voltage (V)	Quiescent Current (μA)	Switching Frequency (MHz)	Note	Temperature Operating Range (° C)	Package
GD30PW4012LUTR-IEC	MP	POL	2.5	18	12	16	6	0.6	140	0.6	COT/PFM	-40~125	QFN-16, 3*3
GD30PW4012OUTR-IED	MP	POL	3	17	12	9	3.2	0.6	180	0.4/0.8/1.2	COT/PFM	-40~125	QFN-18, 3.5*3.5
GD30PW4006BUTR-ISA	MP	POL	2.35	6	6	20	13	0.6	20	1.2	PFM/FPWM	-40~125	UQFN-13, 2*3
GD30PW4004SOTR-IEA	MP	POL	4.2	18	4	55	30	0.796	120	0.58	PFM/CCM	-40~125	SOT563, 1.7*1.7
GD30PW4004BUTR-ISA	MP	POL	2.35	6	4	22	14	0.6	20	1.2	PFM/FPWM	-40~125	UQFN-13, 2*3

Battery Management IC

GD30BM BMS AFE Selection Guide

Part No.	Max Supported Cells	Supported Line Voltage, V	Total Measurement Error, mV	No. of ADC	ADC Resolution, bit	Measurement Time, µs	Passive Cell Balanceing Current, mA	No. of GPIO	Sleep Current, µA	Daisy Chain Support	Max Daisy Chain Rate	Daisy Chain Direction	Package	Temperature Operating Range (° C)	Comments
GD30BM1018RWTR-I	18	16~99	2	3	16	290	200	9	9	Y	1Mbps	Bi-direction	LQFP-64	-40~125	
GD30BM2016CTTR-I	16	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	I^2C/CRC Disable/LDO1 Disable
GD30BM2016CTTR-I01	16	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enable/LDO1 Disable
GD30BM2016CTTR-I02	16	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	I^2C/CRC Enable/LDO1 3.3 V
GD30BM2016CTTR-I03	16	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enbale/LDO1 5 V
GD30BM2016CTTR-I04	16	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enable/LDO1 3.3 V
GD30BM2010CTTR-I	10	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	I^2C/CRC Disable/LDO1 Disable
GD30BM2010CTTR-I01	10	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enable/LDO1 Disable
GD30BM2010CTTR-I02	10	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	I^2C/CRC Enable/LDO1 3.3 V
GD30BM2010CTTR-I03	10	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enbale/LDO1 5 V
GD30BM2010CTTR-I04	10	4.7~80	5	2	16	1000	80	NA	53	Not support	Not support	Not support	TQFP-48	-40~125	SPI/CRC Enable/LDO1 3.3 V
GD30BM3020LUTR-I01	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	1Mbps	Bi-direction	QFN16	-40~125	ISOLATION SPI BRIGE CHIP
GD30BM3020LUTR-I02	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	2.5Mbps	Bi-direction	QFN16	-40~125	ISOLATION SPI BRIGE CHIP
GD30BM3020LMTR-I01	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	1Mbps	Bi-direction	MSOP16	-40~125	ISOLATION SPI BRIGE CHIP
GD30BM3020LMTR-I02	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	2.5Mbps	Bi-direction	MSOP16	-40~125	ISOLATION SPI BRIGE CHIP

GD30BC/WS Battery Charge IC Selection Guide

Part No.	Control Topology	Control Interface	Series Cells	Vin_min (V)	Vin_max (V)	Charging Current (A)	Charging Efficiency (%)	CV Charge Voltage (V)	Quiescent Current (µA)	Temperature Operating Range (° C)	Package
GD30BC2501LRTR	Buck	I^2C	4,6	18	32	5	95	4.1/4.2/4.3/4.35	-	-40~85	QFN16
GD30BC2502LRTR	Buck	I^2C	2,3,5	9	32	5	95	4.1/4.2/4.3/4.35	-	-40~85	QFN16
GD30BC2416FUTR	Buck(Charging)-Boost(Discharging)	I^2C	1	4.4	5.5	1.5	97	4.1/4.2/4.3/4.35/4.4	-	-20~85	QFN20
GD30WS8663DYTR-I	Linear-Mode	I^2C	1	-	36	0.008~0.456	-	3.6~4.545(15mV/step)	-	-40~125	WLCSP9
GD30WS8665DYTR-I	Linear-Mode	I^2C	1	-	36	0.008~0.456	-	3.6~4.545(15mV/step)	-	-40~125	WLCSP9

Battery Management IC

GD30WS TWS Charging Selection Guide

Part No.	Status	Absolute VUSB (V)Max	Control Topology	Charging Current (A)Max	Load Current (A)Max	Charging Efficiency (%)Max	CV Charge Voltage (V)	Quiescent Current (μA)	LDO	Control Interface	Temperature Operating Range (° C)	Package
GD30WS8805EU	MP	20	Switch-Mode	1.2	0.6	95	4.1/4.2/4.3/4.35/4.4 @0.5%	-	3.3V/50mA	I^2C	-20~85	QFN24
GD30WS8815EUTR	MP	20	Switch-Mode	1.5	1	95	4.1/4.2/4.3/4.35/4.4 @0.5%	-	3.3V/80mA	I^2C	-20~85	QFN24
GD30WS8855EUTR	MP	20	Switch-Mode	1.5	1	95	4.1/4.2/4.3/4.35/4.4 @0.5%	-	3.3V/50mA	I^2C	-20~85	QFN24

GD30SP Over Voltage Protector Selection Guide

Part No.	Status	Vin_min (V)	Vin_max (V)	MAX Output Current (A)	Over Voltage Protection (V)Min	Charging Efficiency (%)Max	Internal Switch ON Resistance (MΩ)	Quiescent Current (μA)	Temperature Operating Range (° C)	Package
GD30SP2200WFTR	MP	2.5	30	3	4	15	50	100	-40~85	DFN8L
GD30SP2201WETR-I	MP	2.5	30	1.5	-	6	85	110	-40~85	DFN8L

GD30BP Lithium Battery Protection IC Selection Gudie

Part No.	Number of Cells	OCV [VCU] (V)	OCRV [VCL] (V)	ODV [VDL] (V)	ODRV [VDR] (V)	VEC1 (mV)	VEC2 (mV)	VSHR (mV)	VCOC (mV)	Cell balance [VBL](V)	0V charging function	Package
GD30BP3440LMTR-K	3~4S	3.65±20mV	3.55±20mV	2.3±30mV	2.7±30mV	50mV	100mV	200mV	-20mV	3.525V	1.6V	SSOP-16L
GD30BP3441LMTR-K		3.85±20mV	3.75±20mV	2.3±30mV	2.5±30mV	50mV	100mV	400mV	-50mV	3.625V	1.6V	SSOP-16L
GD30BP3443LMTR-K		4.25±20mV	4.15±20mV	2.7±30mV	3.0±30mV	50mV	100mV	200mV	-20mV	4.125V	1.6V	SSOP-16L
GD30BP3447LMTR-K		4.45±20mV	4.35±20mV	2.5±30mV	3.0±30mV	65mV	130mV	260mV	-50mV	4.325V	1.6V	SSOP-16L
GD30BP3448LMTR-K		4.475±20mV	4.375±20mV	2.7±30mV	3.0±30mV	65mV	130mV	260mV	-50mV	4.350V	1.6V	SSOP-16L
GD30BP3470EMTR-K	4~7S	4.475±20mV	4.375±20mV	2.7±30mV	3.0±30mV	50mV	100mV	200mV	-50mV	4.350V	1.6V	SSOP-24L
GD30BP3471EMTR-K		4.425±20mV	4.325±20mV	2.7±30mV	3.0±30mV	50mV	100mV	200mV	-50mV	4.300V	1.6V	SSOP-24L
GD30BP3472EMTR-K		4.25±20mV	4.15±20mV	2.8±30mV	3.0±30mV	50mV	100mV	200mV	-20mV	4.125V	1.6V	SSOP-24L
GD30BP3473EMTR-K		4.25±20mV	4.15±20mV	2.7±30mV	3.0±30mV	50mV	100mV	200mV	-20mV	4.125V	1.0V	SSOP-24L

Motor Driver

GD30DR Brushed DC Motor Driver Selection Guide

Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	Gate Driver	Power MOSFET	Drive Current (A)	Control I nterface	Current Sensor	Protection Features	Itrip Funcation	PWM Frequency (kHz) Max	Temperature Operating Range (° C)	Package
GD30DR3000WGTR-K	6.5	40	-	Internal	3.2	PWM	extend	OCP/SCP/TSD/UVLO	Support	100	-40~125	ESOP8
GD30DR3001WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	extend	OCP/SCP/TSD/UVLO	Support	200	-40~125	EP-SOP8
GD30DR3002WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	extend	OCP/SCP/TSD/UVLO/nFault Instruction	Support	200	-40~125	EP-SOP8
GD30DR3003WGTR-K	4.5	40	-	Internal	6A Peak 4A Continuous	PWM	Internal	OCP/SCP/TSD/UVLO	Support	200	-40~125	EP-SOP8
GD30DR3004WGTR-K	6.5	60	-	Internal	3.2	PWM	extend	OCP/SCP/TSD/UVLO	Support	100	-40~125	ESOP8
GD30DR3800WETR-K	0	11	-	Internal	1.8	PWM	-	OCP/SCP/TSD/UVLO	NA	250	-40~85	DFN8
GD30DR3800WGTR-K	0	11	-	Internal	1.8	PWM	-	OCP/SCP/TSD/UVLO	NA	250	-40~85	SOP8
GD30DR3801WETR-K	0	10	-	Internal	1	PWM	-	OCP/SCP/TSD/UVLO	NA	250	-40~85	DFN8
GD30DR3007WGTR-K	4.5	36	-	Internal	3.7A Peak 3A Continuous	PWM	extend	OCP/SCP/TSD/UVLO	Support	200	-40~125	EP-SOP8
GD30DR3008WGTR-K	4.5	36	-	Internal	3.7A Peak 3A Continuous	PWM	extend	OCP/SCP/TSD/UVLO/nFault Instruction	Support	200	-40~125	EP-SOP8
GD30DR3009WGTR-K	4.5	36	-	Internal	3.7A Peak 3A Continuous	PWM	Internal	OCP/SCP/TSD/UVLO	Support	200	-40~125	EP-SOP8
GD30DR3010WGTR-K	4.5	33	-	Internal	3A Continuous	PWM	I-SET	OCP/SCP/TSD/UVLO	Support	200	-40~125	EP-SOP8

GD30DR Stepper Motor Driver Selection Guide

Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	H Bridge Number	Power MOSFET	Drive Current (A)	Control Interface	Oscillator	Protection Features	PWM Frequency (kHz) Max	Microstepping	Temperature Operating Range (° C)	Package
GD30DR3820LPTR-K	2.5	10.8	2	Internal	1	PWM	-	OCP/SCP/TSD/UVLO	200	NA	-40~85	eTSSOP16
GD30DR3820LUTR-K	2.5	10.8	2	Internal	0.9	PWM	-	OCP/SCP/TSD/UVLO	200	NA	-40~85	QFN16
GD30DR4730FUTR-K	1.8	5.5	5	Internal	0.5	IIC	extend	OCP/TSD/UVLO	-	Full/Half/32 Micro-Steps/ 64 Micro-Steps	-40~85	QFN20
GD30DR4731YUTR-K	3	5.5	5	Internal	0.5	4-Line Serial Data	extend	OCP/TSD/UVLO	-	256-step	-40~85	QFN44
GD30DR4732YUTR-K	3	5.5	5	Internal	0.5	4-Line Serial Data	extend	OCP/TSD/UVLO	-	256-step	-40~85	QFN44

GD30DR Brushless DC (Driver) Motor Selection Guide

Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	High-side Voltage(V)	Gate Driver	Power MOSFET	Gate Driver Peak Current (A) Source	Gate Driver Peak Current (A) Sink	Control Interface	Self-boost diode	PWM Frequency (kHz) Max	Buck Controller	LDO	Temperature Operating Range (° C)	Package
GD30DR1488FPTR-K	4	18	150	3	External	1	1.3	6xPWM	Internal	500	-	-	-40~125	TSSOP20
GD30DR1488EUTR-K	4	18	150	3	External	1	1.3	6xPWM	Internal	500	-	-	-40~125	QFN24
GD30DR1401EUTR-I	5	20	120	3	External	2	2.5	6xPWM	Internal	500	-	5.0v	-40~125	QFN24
GD30DR1401EPTR-I	5	20	120	3	External	2	2.5	6xPWM	Internal	500	-	5.0v	-40~125	SSOP24

Part No.	Supply Voltage (V) Min	Supply Voltage (V) Max	Gate Driver	Power MOSFET	Drive Current (A)	Control Interface	Current Sensor	Protection Features	Itrip Funcation	PWM Frequency (kHz) Max	Temperature Operating Range (° C)	Package
GD30DR8413EUTR	4.5	30	-	Internal	3	3xPWM	extend	OCP/SCP/TSD/UVLO	NA	50	-40~125	QFN24

Motor Driver

GD30DR/TB Brushless DC (SOC) Motor Selection Guide

Part No.	Core	Max Speed (MHz)	Memory		I/O	Timer						Connectivity					Analog Interface		Integrated three half-bridge gate driver	Temperature Operating Range (° C)	Package
			Flash (KB)	SRAM(KB)		GPTM (32Bit)	GPTM (16Bit)	Advanced TM(16Bit)	SysTick (24Bit)	WDG	RTC	USART +UART	CAN FD	I²C	SPI	CMP	12Bit ADC(CHs)	12Bit DAC(CHs)			
GD30DRE518QUTY-K	Cortex-M33	180	512	128	62	1	12	2	1	2	1	3+2	3	2	3	3	16	3	150V	-40~85	QFN88

Part No.	Core	Max Speed (MHz)	Memory		I/O	DIV	Timer Functions				Connectivity						Analog Interface			PGA	Pin Info				Temperature Operating Range (° C)
			Flash (KB)	RAM (KB)			Advanced TMR	GP TMR	WDG	RTC	UART	I²C	SPI	I²S	CAN	LIN	ADC (1Msps, 12bit)*	DAC (5bit)	CMP		Pin Counts	Package	Package Size	Pitch	
GD30TB6302FU	M0	64	32	4	18	√	1	4	1	N	1	1	1	0	0	0	1, 10ch	1	2	2	20	QFN	3x3	0.65	-40~105
GD30TB6302FP	M0	64	32	4	18	√	1	4	1	N	1	1	1	0	0	0	1, 10ch	1	2	2	20	TSSOP	6.5x4.4	0.5	-40~105
GD30TB6302EM	M0	64	32	4	22	√	1	4	1	N	1	1	1	0	0	0	1, 12ch	1	2	2	24	SSOP	8.15x5.3	0.65	-40~105
GD30TB6302KU	M0	64	32	4	30	√	1	4	1	N	1	1	1	0	0	0	1, 15ch	1	2	2	32	QFN	5x5	0.5	-40~105
GD30TB6302KW	M0	64	32	4	30	√	1	4	1	N	1	1	1	0	0	0	1, 15ch	1	2	2	32	LQFP	7x7	0.8	-40~105

Signal Chain

GD30AD ADC Selection Guide

Part No.	Status	Analog Supply (V)	Digital Supply (V)	Channel	Resolution (bit)	Max Smpling Rate(KSPS)	Input Range(V)	SNR(dB)	THD (dB)	INL (LSB)	Power (mW)	Interface Type	Temperature Operating Range (° C)	Package
GD30AD3380RWTR-I05	MP	4.5~5.5	1.71~5	8	16	500	+/-12.5V, +/-10V +/-5V, +/-2.5V	91	-105	+/-1	53	SPI / Parallel	-40~125	LQFP64
GD30AD3380RWTR-I10	MP	4.5~5.5	1.71~5	8	16	1000	+/-12.5V, +/-10V +/-5V, +/-2.5V	91	-105	+/-1	53	SPI / Parallel	-40~125	LQFP64
GD30AD33G0VWTR-I10	MP	4.5~5.5	1.71~5	16	16	1000	+/-10V +/-5V, +/-2.5V	90.5	-102	+/-1	160	SPI / Parallel	-40~125	LQFP80
GD30AD33G1VWTR-I10	MP	4.5~5.5	1.71~5	16	16	1000	+/-10V +/-5V, +/-2.5V	90.5	-102	+/-1	160	SPI / Parallel	-40~125	LQFP80
GD30AD3382FUTR-I02	MP	4.5~5.5	1.8~5.8	8	16	250	SE: 0~4.096 Diff: +/-2.048	90.5	-110	+/-0.5	12.5	SPI	-40~105	QFN20
GD30AD3382FUTR-I05	MP	4.5~5.5	1.8~5.8	8	16	500	SE: 0~4.096 Diff: +/-2.048	90.5	-110	+/-0.5	26	SPI	-40~105	QFN20
GD30AD3340AMTR-I	MP	2.2~5.5	NA	4 SE, 2 Diff	16	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	I²C	-40~125	MSOP10
GD30AD3344AMTR-I	MP	2.2~5.5	NA	4 SE, 2 Diff	16	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	SPI	-40~125	MSOP10
GD30AD3640AMTR-I	MP	2.7~5.5	NA	4 SE, 2 Diff	24	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	I²C	-40~125	MSOP10
GD30AD3641AMTR-I	MP	2.7~5.5	NA	4 SE, 2 Diff	24	1	+/-0.064~+/-6.144	NA	NA	+/-8ppm/FS	0.9	SPI	-40~125	MSOP10

Signal Chain

GD30AP/HA Operation Amp Selection Guide

Part No.	Status	Supply Voltage Range Vs(V)	Channel	Gain BW(MHz)	Slew Rate (V/us)	Power Consumption, mA/Ch	Input Offset, Max, mV	Input Offset Drift, Max, uV/degC	Noise, 0.1Hz~10Hz (uV-pp)	Noise Floor @1KHz (nV/sqrtHz)	Input Bias (pA) Typical	PSRR (dB) Typical	VCM (V)	CMRR (dB) Typical	Open loop Gain, Avol (dB) Typical	RRI	RRO	Temperature Operating Range (° C)	Package
GD30AP321N	MP	1.8~5.5 +/-0.9 ~ +/-2.75	1	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40~125	SOT23-5L/SC70-5L
GD30AP358N	MP	1.8~5.5 +/-0.9 ~ +/-2.75	2	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40~125	SOIC-8L/MSOP-8L/ DFN2x2-8L
GD30AP324N	MP	1.8~5.5 +/-0.9 ~ +/-2.75	4	1.2	1	0.085	+/-3	3.5	6	30	5	110	Vsm-0.1~Vsp+0.1	83	105	•	•	-40~125	SOIC-14L/TSSOP-14L
GD30AP321A	MP	1.8~5.5 +/-0.9 ~ +/-2.75	1	1	1	0.085	0~1	3	6	29	1	106	Vsm-0.1~Vsp+0.1	96	105	•	•	-40~125	SOT23-5L
GD30AP358A	MP	1.8~5.5 +/-0.9 ~ +/-2.75	2	1	1	0.085	0~1	3	6	29	1	106	Vsm-0.1~Vsp+0.1	96	105	•	•	-40~125	SOIC-8L
GD30AP721	MP	1.8~5.5 +/-0.9 ~ +/-2.75	1	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40~125	SOT23-5L
GD30AP722	MP	1.8~5.5 +/-0.9 ~ +/-2.75	2	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40~125	SOIC-8L/MSOP-8L/ DFN2x2-8L/SOT23-8L
GD30AP724	MP	1.8~5.5 +/-0.9 ~ +/-2.75	4	11	11.5	0.78	+/-3	+/-3	3.7	8	1	110	Vsm-0.1~Vsp+0.1	84	105	•	•	-40~125	SOIC-14L/TSSOP-14L
GD30AP8551	MP	1.8~5.5	1	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40~125	SOT23-5L/SOIC-8L
GD30AP8552	MP	1.8~5.5	2	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40~125	SOIC-8L/MSOP-8L/DFN2x2-8L
GD30AP8554	MP	1.8~5.5	4	1.5	1.2	0.125	+/-0.008	+/-0.04	0.45	19	+/-70	126	Vsm-0.1~Vsp+0.1	130	132	•	•	-40~125	SOIC-14L/TSSOP-14L/DFN3x3-16L
GD30AP8631	MP	2.3~5.5 +/-1.15 ~ +/-2.75	1	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40~125	SOT23-5L
GD30AP8632	MP	2.3~5.5 +/-1.15 ~ +/-2.75	2	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40~125	SOIC-8L/MSOP-8L/DFN2x2-8L
GD30AP8634	MP	2.3~5.5 +/-1.15 ~ +/-2.75	4	9	8.5	0.7	+/-3.5	+/-2	4.2	13	1	106	Vsm-0.1~Vsp+0.1	82	102	•	•	-40~125	SOIC-14L
GD30HA2904	MP	3~36 +/-1.5 ~ +/-18	2	0.7	0.3	0.25	+/-10	+/-7	NA	40	-20000	100	Vsm~Vsp-2	80	85	N	N	-40~125	SOIC-8L/MSOP-8L
GD30HA2902	MP	3~36 +/-1.5 ~ +/-18	4	0.7	0.3	0.25	+/-10	+/-7	NA	40	-20000	100	Vsm~Vsp-2	80	85	N	N	-40~125	SOIC-14L/TSSOP-14L
GD30HA8281	MP	4.5~48 +/-2.25 ~ +/-24	1	10	9	2.75	+/-1.8	+/-2	4	10	10	100	Vsm~Vsp-1.5	100	118	N	N	-40~125	SOT23-5L/SOIC-8L/MSOP-8L
GD30HA8282	MP	4.5~48 +/-2.25 ~ +/-24	2	10	9	2.75	+/-1.8	+/-2	4	10	10	100	Vsm~Vsp-1.5	100	118	N	N	-40~125	SOIC-8L
GD30HA8284	MP	4.5~48 +/-2.25 ~ +/-24	4	10	9	2.75	+/-1.8	+/-2	4	10	10	100	Vsm~Vsp-1.5	100	118	N	N	-40~125	SOIC-14L
GD30AP8331	MP	1.8~5.5V	1	0.35	6	0.026	+/-0.015	+/-0.05	1.1	57	+/-150	126	Vsm-0.1~Vsm+0.1	130	130	•	•	-40~125	SOT23-5L/SOIC-8/MSOP-8
GD30AP8332	MP	1.8~5.5V	2	0.35	6	0.026	+/-0.015	+/-0.05	1.1	57	+/-150	126	Vsm-0.1~Vsm+0.1	130	130	•	•	-40~125	DFN2x2-8L/SOIC-8/MSOP-8
GD30AP8333	MP	1.8~5.5V	1	0.35	6	0.026	+/-0.015	+/-0.05	1.1	57	+/-150	126	Vsm-0.1~Vsm+0.1	130	130	•	•	-40~125	SOT23-5L/SC70-5L
GD30AP8811	MP	1.7~5.5V	1	0.015		0.006	+/-3	+/-0.003	6.3	177	1	92	Vsm-0.1~Vsm+0.1	84	97	•	•	-40~85	SOT23-5L/SC70-5L
GD30AP8812	MP	1.7~5.5V	2	0.015		0.006	+/-3	+/-0.003	6.3	177	1	92	Vsm-0.1~Vsm+0.1	84	97	•	•	-40~85	DFN2x2-8L/SOIC-8L/MSOP-8L
GD30AP8814	MP	1.7~5.5V	4	0.015		0.006	+/-3	+/-0.003	6.3	177	1	92	Vsm-0.1~Vsm+0.1	84	97	•	•	-40~85	SOIC-14L/TSSOP-14L/QFN3x3-16L

Signal Chain

GD30IN Current Monitor Selection Guide

Part No.	Supply Voltage Range Vs (V)	Channel	Common Mode Voltage (V)	Input Offset, max, mV	Input Offset Drift, Max, uV/degC	Max gain error	Max gain drift (ppm/° C)	Gain (V/V)	CMRR (dB)	3dB BW (KHz)	Slew Rate (V/us)	Noise Floor (nV/sqrtHz)	Max Swing From Rail (V)	Temperature operating Range (° C)	Package
GD30IN199GSDTR-IL1	2.5~18	1	-0.3~26	0.018	0.5	0.005	10	50	105	80	0.65	25	0.05~ Vsp-0.2	-40~125	SC70-6L
GD30IN199GSDTR-IL2	2.5~18	1	-0.3~26	0.018	0.5	0.005	10	100	105	30	0.65	25	0.05~ Vsp-0.2	-40~125	SC70-6L
GD30IN199GSDTR-IA1	2.7~30	1	-0.3~30	0.015	1	0.01	10	50	105	120	1.5	30	0.002~ Vsp	-40~125	SC70-6L
GD30IN199GSDTR-IA2	2.7~30	1	-0.3~30	0.015	1	0.01	10	50	105	50	1.5	30	0.002~ Vsp	-40~125	SC70-6L
GD30IN199GSDTR-IA3	2.7~30	1	-0.3~30	0.015	1	0.01	10	50	105	20	1.5	30	0.002~ Vsp	-40~125	SC70-6L
GD30IN240AWGTR-IA1	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	20	162	560	1.5	85	0.001~VS-0.005	-40~125	SOIC-8
GD30IN240AWGTR-IA2	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	50	162	560	1.5	85	0.001~VS-0.005	-40~125	SOIC-8
GD30IN240AWGTR-IA3	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	100	162	560	1.5	85	0.001~VS-0.005	-40~125	SOIC-8
GD30IN240AWPTR-IA1	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	20	162	560	1.5	85	0.001~VS-0.005	-40~125	TSSOP-8
GD30IN240AWPTR-IA2	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	50	162	560	1.5	85	0.001~VS-0.005	-40~125	TSSOP-8
GD30IN240AWPTR-IA3	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	100	162	560	1.5	85	0.001~VS-0.005	-40~125	TSSOP-8
GD30IN240AWMTR-IA1	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	20	162	560	1.5	85	0.001~VS-0.005	-40~125	MSOP-8
GD30IN240AWMTR-IA2	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	50	162	560	1.5	85	0.001~VS-0.005	-40~125	MSOP-8
GD30IN240AWMTR-IA3	2.7~5.5	1	-6~80	0.015	0.6	0.0001	5	100	162	560	1.5	85	0.001~VS-0.005	-40~125	MSOP-8
GD30IN226CAMTR-I	2.7~5.5	1	-0.3~40	0.001	0.02	0.001	20	NA	160	NA	NA	NA	NA	-40~125	MSOP-10
GD30IN238LAMTR-I	2.7~5.5	1	-5~65	0.0025	0.15	0.001	30	NA	168	NA	NA	NA	NA	-40~125	MSOP-10

GD30CP Comparator Selection Guide

Part No.	Status	Supply Voltage Range Vs (V) Min	Supply Voltage Range Vs (V) Max	Channel	Output Type	Input Hysteresis (mV)	Propogation Delay (ns) 100mV Overdrive, High to Low	Propogation Delay (ns) 100mV Overdrive, Low to High	Power Consumption, mA/Ch	Input Offset, max, mV	Input Offset Drift, Max, uV/degC	VCM (V) Min	VCM (V) Max	CMRR (dB) Vs-5.5V	Temperature operating Range (° C)	Package
GD30CP331	MP	1.8	5.5	1	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40~85	SOT23-5L/SC70-5L
GD30CP393	MP	1.8	5.5	2	Open drain	3	100	150	0.06	+/-5	+/-2	Vsm-0.1	Vsp+0.1	58	-40~85	SOIC-8L/MSOP-8L/ TSSOP-8L/DFN2x2-8L
GD30CP8721	MP	1.7	5.5	1	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40~85	SOT23-5L/SC70-5L
GD30CP8722	MP	1.7	5.5	2	Push pull	3	66	78	0.046	+/-4	+/-1	Vsm-0.1	Vsp+0.1	55	-40~85	SOIC-8L/MSOP-8/ DFN2x2-8L
GD30CP2903	MP	3	36	2	Open collector	NA	300 (TTL input level setp)	1300 (100mV Input Step With 5mV Overdrive)	0.65	+/-15	NA	Vsm	Vsp-2	NA	-40~125	SOIC-8L/MSOP-8L
GD30CP2901	MP	3	36	4	Open collector	NA	300 (TTL input level setp)	1300 (100mV Input Step With 5mV Overdrive)	1.15	+/-15	NA	Vsm	Vsp-2	NA	-40~125	SOIC-14L/TSSOP-14L

Signal Chain

GD30VR Voltage Reference Selection Guide

Part No.	Reference Voltage Vref (V)	Deviation of Reference Input Voltage Over Full Temp VI(dev) (mV)	Ratio of Change in Reference Voltage to The Change in Cathode Voltage (mV/V)	Reference Input Current Iref (uA)	Deviation of Reference Input Current Over Full Temperature Range I(dev) (uA)	Minimum Cathode Current for Regulation Izmin (mA)	Off-state Cathode Current Ioff (uA)	Dynamic Imp edance (Ohm)	Temp Drift (ppm/° C)	Temperature Operating Range (° C)	Package
GD30VR431ABSTR-I	2.484~2.509	10	-0.5	0.7	0.4	0.15	0.1	0.2	NA	-40~125	SOT23-3
GD30VR431HBSTR-I	2.493~2.508	4	-0.5	0.7	0.4	0.12	0.1	0.2	NA	-40~125	SOT23-3
GD30VR432ABSTR-I	1.244~1.256	15	-0.5	0.15	0.1	0.055	0.01	0.05	20	-40~125	SOT23-3
GD30VR432BBSTR-I	1.238~1.263	15	-0.5	0.15	0.1	0.055	0.01	0.05	20	-40~125	SOT23-3

Part No.	Status	Power Supply (V)	Output Voltage (V)	Temp Drift (ppm/° C)	Initial Accuracy (%)	Current Load (mA)	Noise μVpp (V)	Temperature Operating Range(° C)	Package
GD30VR3100WGTR-I20	MP	2.7~18V	2.048	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I20	MP	2.7~18V	2.048	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR3100WGTR-I25	MP	2.7~18V	2.5	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I25	MP	2.7~18V	2.5	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR3100WGTR-I30	MP	3.2~18V	3	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I30	MP	3.2~18V	3	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR3100WGTR-I40	MP	4.296~18V	4.096	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I40	MP	4.296~18V	4.096	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR3100WGTR-I45	MP	4.7~18V	4.5	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I45	MP	4.7~18V	4.5	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR3100WGTR-I50	MP	5.2~18V	5	3	0.05	+/-10	1.5	-40~125	SOP8
GD30VR1100WGTR-I50	MP	5.2~18V	5	8	0.1	+/-10	1.5	-40~125	SOP8
GD30VR1100WMTR-I20	MP	2.7~18V	2.048	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1100WMTR-I25	MP	2.7~18V	2.5	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1100WMTR-I30	MP	3.2~18V	3	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1100WMTR-I40	MP	4.296~18V	4.096	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1100WMTR-I45	MP	4.7~18V	4.5	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1100WMTR-I50	MP	5.2~18V	5	8	0.1	+/-10	1.5	-40~125	MSOP8
GD30VR1000BSTR-I20	MP	2.2~5.5	2.048	15	0.1	+/-10	10	-40~125	SOT23-3
GD30VR1000BSTR-I25	MP	2.7~5.5	2.5	15	0.1	+/-10	10	-40~125	SOT23-3
GD30VR1000BSTR-I30	MP	3.2~5.5	3	15	0.1	+/-10	10	-40~125	SOT23-3
GD30VR1000BSTR-I33	MP	3.5~5.5	3.3	15	0.1	+/-10	10	-40~125	SOT23-3
GD30VR1000BSTR-I40	MP	4.2~5.5	4.096	15	0.1	+/-10	10	-40~125	SOT23-3
GD30VR1000BSTR-I50	MP	5.2~5.5	4	15	0.1	+/-10	10	-40~125	SOT23-3

Signal Chain

GD30TS/TSHT Temperature/Temperature-Humidity Sensor Selection Guide

Part No.	Status	Type	Power Supply (V)	No. of local/Remote Channel	Accuracy, Max Error (° C)	Interface	Temperature Operating Range (° C)	Address	Package
GD30TS002	MP	T-Sensor	2.2~5.5	1 * Local	+/-0.1@35~45° C +/-0.3@0~90° C	I²C	-40~125	ADDR pin selected	WLCSP-8
GD30TS003	MP	T-Sensor	2.4~5.5	1 * Local	+/-0.1@35~45° C +/-0.3@0~90° C	I²C	-40~125	ADDR pin selected	DFN-8
GD30TS004	MP	T-Sensor	1.6~5.5	1 * Local	+/-0.1@35~45° C +/-0.3@0~90° C	I²C	-40~125	Fixed	DFN-6
GD30TS310	MP	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45° C +/-0.3@-10~60° C +/-0.5@-40~125° C	I²C	-55~150	x=0~7	MCLGA-4/WLCSP-4/ DFN-6
GD30TS100	MP	T-Sensor	2.7~5.5	1 * Local	+/-0.5@0~65° C +/-1@-40~125° C	I²C	-55~125	ADD0 ADD1 pin seleccted	SOT23-6
GD30TS101	MP	T-Sensor	2.7~5.5	1 * Local	+/-0.5@0~65° C +/-1@-40~125° C	I²C	-55~125	ADD0 pin seleccted	SOT23-6
GD30TS075C	MP	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55° C +/-1@-55~125° C	I²C	-55~125	A0,A1,A2 pin selected	SOP-8/MSOP-8/ DFN-8
GD30TS112	MP	T-Sensor	1.4~5.5	1 * Local	+/-0.5@0~65° C +/-1@-40~125° C	I²C	-55~150	ADD0 pin selected	SOT563-6/DFNWB-6
GD30TS304	MP	T-Sensor	VDD: 2.7~5.5 VIO: 1.6~5.5	1 * Local 4 * remote	Local: +/-1@-40~125° C Remote: +/-1.5@-40~125° C	I²C	-40~125	ADD pin selected	QFN-16
GD30TS308	MP	T-Sensor	VDD: 2.7~5.5 VIO: 1.6~5.5	1 * Local 8 * remote	Local: +/-1@-40~125° C Remote: +/-1.5@-40~125° C	I²C	-40~125	ADD pin selected	QFN-16
GD30TS451	MP	T-Sensor	1.7~5.5	1 * Local 1 * remote	Local: +/-2@-40~125° C Remote: +/-4@-50~150° C	I²C	-55~150	Fixed	WSON-8
GD30TS431N	MP	T-Sensor	2.7~5.5	1 * Local 1 * remote	Local: +/-1@-40~125° C Remote: +/-2@-40~125° C	I²C	-55~150	Fixed	MSOP-8
GD30TS432N	MP	T-Sensor	2.7~5.5	1 * Local 2 * remote	Local: +/-1@-40~125° C Remote: +/-2@-40~125° C	I²C	-55~150	Fixed	MSOP-10
GD30TS110	MP	T-Sensor	1.6~5.5	1 * Local	+/-0.1@30~45° C +/-0.5@-40~125° C	Single	-40~125	NA	WLCSP-4/MCLGA-4/ DFN-6/TO-92S
GD30TS0011	MP	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55° C +/-1@-40~125° C	Pulse	-50~150	NA	DFN-2/TO-92S/ TO-92S-2
GD30TS084	MP	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125° C	Analog output	-55~125	NA	SOT23-5/TO-92/ TO-92S
GD30TS085	MP	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125° C	Analog output	-55~125	NA	SOT23-5/TO-92/ TO-92S
GD30TS086	MP	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125° C	Analog output	-55~125	NA	SOT23-5/TO-92/ TO-92S
GD30TS087	MP	T-Sensor	2.5~5.5	1 * Local	+/-2.7@-50~125° C	Analog output	-55~125	NA	SOT23-5/TO-92/ TO-92S
GD30TS036	MP	T-Sensor	2.7~5.5	1 * Local	+/-3@-40~125° C	Analog output	-40~125	NA	SOT23-5/SOT23-3/ SOIC-8/TO-92
GD30TS708	MP	T-switch	2.7~5.5	1 * Local	+/-3@-60~100° C	NA	0~125	NA	SOT23-5/DFN-6
GD30TS709	MP	T-switch	2.7~5.5	1 * Local	+/-3@-60~100° C	NA	0~125	NA	SOT23-5/DFN-6
GD30TS302T	MP	T-Sensor	2.7~5.5	1 * Local 2 * remote	Local: +/-1.5@-40~125° C Remote: +/-1.5@-40~125° C	I²C	-55~150	ADDR pin selected	MSOP-10/DFN-10
GD30TS075B	MP	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55° C +/-1@-55~125° C	I²C	-55~125	A0, A1, A2 pin selected	SOP-8/MSOP-8/ DFN-8
GD30TS076C	MP	T-Sensor	1.4~5.5	1 * Local	+/-0.6@-25~55° C +/-1@-55~125° C	I²C	-55~125	A0, A1, A2 pin selected	SOP-8/MSOP-8/ DFN-8
GD30TS111	MP	T-Sensor	2.5~5.5	1 * Local	+/-0.4@-10~85° C +/-1.2@-55~125° C	Single	-55~125	NA	TO-92, TO-92-2, MSOP-8/ SOP-8/TO-92S

Signal Chain

GD30TS/TSHT Temperature/Temperature-Humidity Sensor Selection Guide

Part No.	Status	Type	Power Supply (V)	No. of local/Remote Channel	Accuracy, Max Error (° C)	Interface	Temperature Operating Range (° C)	Address	Package
GD30TSHT30	MP	TH-Sensor	2.0~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@-40~90° C H: +/-3%@10%~90%RH	I²C	-45~130	ADDR pin selected	DFN-8
GD30TSHTC3	MP	TH-Sensor	1.6~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@0~60° C H: +/-3%@20%~80%RH	I²C	-45~130	Fixed	DFN-6
GD30TSHT3A	MP	TH-Sensor	2.0~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@-40℃ ~90° C H: +/-3%@10%~90%RH	Analog output	-45~130	NA	DFN-8
GD30TSHT4A	MP	TH-Sensor	2.0~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.3@0℃ ~65° C H: +/-3%@10%~90%RH	Analog output	-45~130	NA	DFN-6
GD30TSHTV4	MP	TH-Sensor	1.6~5.5	1 * Local T-Sensor 1 * Local H-Sensor	T: +/-0.2@0~65° C H: +/-2.5%@10%~90%RH	I²C	-40~125	Fixed	DFN-4

GD30GA I²C & I³C Interface IC Selection Guide

Part No.	Status	Type	Power Supply (V)	Description	With INT	With Reset	Interface	Address	Package
GD30GA9548	MP	I²C_SWITCH	1.65~5.5	8 Channel SMBus and I2C Switch	No	yes	I²C	1110,0A1A0R/W	TSSOP-24
GD30GA9546	MP	I²C_SWITCH	1.65~5.5	4 Channel SMBus and I2C Switch	No	yes	I²C	1110,0A1A0R/W	TSSOP-16
GD30GA9545	MP	I²C_SWITCH	1.65~5.5	4 Channel SMBus and I2C Switch	yes	yes	I²C	1110,0A1A0R/W	TSSOP-20

GD30PH Ethernet PHY IC Selection Guide

Part No.	Status	Type	Mac Interface	Description	Package
GD30PH201D	MP	Ethernet PHY	MII/RMII	Single-port Industrial Ethernet 100Mbps PHY	QFN-32
GD30PH211D	MP	Ethernet PHY	RGMII	Single-port Gigabit Ethernet PHY	QFN-40
GD30PH211F	MP	Ethernet PHY	RGMII	Single-port Gigabit Ethernet PHY	QFN-40
GD30PH211S	MP	Ethernet PHY	RGMII/SGMII	Single-port Gigabit Ethernet PHY with integrated SerDes	QFN-48

Capacitor Sensitivity

GD30BC Battery Charge IC Selection Guide

Part No.	Control Topology	Control Interface	Series Cells	Vin_min (V)	Vin_max (V)	Charging Current (A)	Charging Efficiency (%)	CV Charge Voltage (V)	Quiescent Current (μA)	Temperature Operating Range(° C)	Package
GD30BC1502x	Linear-Mode	-	1	-	36	0.6	-	4.2/4.35	-	-40~125	SOT235
GD30BC1500x	Linear-Mode	-	1	-	36	0.8	-	4.2/4.35	-	-40~125	SOT235
GD30BC1501x	Linear-Mode	EN	1	-	36	1	-	4.2/4.35	-	-40~125	ESOP8/DFN2*2/DFN3*3
GD30BC1503x	Linear-Mode	EN	1	-	36	1	-	4.2/4.35	-	-40~125	ESOP8/DFN2*2/DFN3*3

GD30MC 8 bit MCU Selection Guide

Part No.	ROM	RAM	EEPROM	I/O	ADC	Touch	LCD/LED	Timer Counter	PWM	INT	LDO	I²C	SPI	UART	LVD	CMP	LVR	RTC	IRC Freq [MHz]	Ext.X-tal [MHz]	Op. Volt. [V]	Temperature Operating Range (° C)	Remarks	Package	Burning method	Core
GD30MCG100	1K x 14bit	48	-	4&6	-	-	-	8bit x 1, 12bit x 1	12bit x 1	5	-					1	8Level	-	0.91,1,8	-	1.8~5.5	-40~85	Capture	SOT23-6/SOP8	OTP	risc core
GD30MCG101	1K x 14bit	48	-	4&6	-	-	-	8bit x 1, 12bit x 1	12bit x 1	4	-					-	6Level	-	0.91,1,8	-	1.8~5.5	-40~85	-	SOT23-6/SOP8	OTP	risc core
GD30MCG102	1K x 14bit	48	-	4&6	-	-	-	8bit x 2	8bit x 3	4	-					-	8Level	Y	0.91,1,8	16	1.8~5.5	-40~85	-	SOT23-6/SOP8	OTP	risc core
GD30MCG103	1K x 14bit	48	-	4&6	-	-	-	8bit x 2	8bit x 3	4	-					-	8Level	Y	0.91,1,8	16	1.8~5.5	-40~85	IO output 200mA	SOT23-6/SOP8	OTP	risc core
GD30MCG113	2K x 14bit	96	-	6&12&14&18	-	-	-	8bit x 1, 12bit x 5	12bit x 5	8	-				28Level		8Level	Y	0.91,1,8	16	1.8~5.5	-40~85	PWM dead zone control/ complementary, 5 IO output 200mA	SOP8/SOP14/SOP16/ SOP20/TSSOP20	OTP	risc core
GD30MCG114	2K x 14bit	96	-	6&12&14	-	-	-	8bit x 1, 10bit x 2	10bit x 6	7	-					1	8Level	-	0.91,1,8	-	1.8~5.5	-40~85	BZ,Illusionary Lantern	SOP8/SOP14/SOP16	OTP	risc core
GD30MCG310	2K x 14bit	80	64 x 8bit	4&6	-	-	-	8bit x 2	8bit x 3	5	-					-	8Level	Y	0.91,1,8	16	1.8~5.5	-40~85	-	SOT23-6/SOP8	OTP	risc core
GD30MCG410	2K x 14bit	80	-	4&6		6		8bit x 2	8bit x 3	5	4Level					-	8Level	-	0.91,8	-	1.8~5.5	-40~85	-	SOT23-6/SOP8	OTP	risc core
GD30MCG110	2K x 16bit	128	-	6&8	12bit x 8		-	8bit x 1, 12bit x 1, 16bit x 1	12bit x 3	6						-	-	-	1,2,4,8	-	1.8~5.5	-40~85	Capture、PWM complementary	SOP8/DFN10	OTP	risc core
GD30MCG111	2K x 16bit	128	-	6&8&12&14	12bit x 14		-	8bit x 1, 10bit x 2	10bit x 4	10						-	-	-	1,3.4,4.8, 5.4,6,8	-	1.8~5.5	-40~85	-	SOP8/MSOP10/SOP14/ SOP16/QFN16	OTP	risc core
GD30MCG210	2K x 16bit	176	128 x 16bit	6&8&12&14	12bit x 14		6x7	8bit x 1, 12bit x 2	12bit x 6	11						1	8Level	-	1,4,8,16	-	1.8~5.5	-40~85	BZ,Illusionary Lantern, ISP	SOP8/MSOP10/SOP14/ SOP16/QFN16	MTP	risc core
GD30MCG211	2K x 16bit	176	-	14	12bit x 14	-	-	8bit x 1, 12bit x 2	12bit x 6	10						1	8Level	-	1,4,8,16	-	1.8~5.5	-40~85	BZ,Illusionary Lantern, ISP	QFN16	MTP	risc core
GD30MCG220	4K x 16bit	256	128 x 16bit	6&14&18&22	12bit x 17		4x16, 4x8	16bit x 2, 12bit x 2	12bit x 6	15				1		1	8Level	Y	1,6,16,32	16M/32K	1.8~5.5	-40~85	Capture,ISP,PWM dead zone control,1/2Bias-LCD	TSSOP24/QFN24/ TSSOP20/QFN20/ SOP16/QFN16/SOP8	MTP	risc core
GD30MCG221	4K x 16bit	256	-	14&18&22	12bit x 17		-	16bit x 2, 12bit x 2	12bit x 6	15				1		1	8Level	-	1,6,16,32	-	1.8~5.5	-40~85	Capture,ISP,PWM dead zone control	QFN24/QFN20/QFN16	MTP	risc core
GD30MCF640	16K x 8bit	1K	128	14&18	12bit x 8		-	8bit x 1, 16bit x 3	16bit x 6	17		1	1	2		2			16		2.4~5.5	-40~85	EEPROM、IAP	SOP16/TSSOP20/ QFN20(3*3)	MTP	51 core
GD30MCG430	8K x 16bit	256	128	10	10bit x 8		-	8bit x 1, 16bit x 6	16bit x 4	20	Y	-	-	1		2			1,2,4,8		8-42	-40~85	PGA, constant current source、UART	SOP16	MTP	risc core

Capacitive Touch Controllers

Capacitive Touchscreen Controllers

- Support up to 15.6-inch LCD TFT touchscreens, addressing tablet, consumer, and industrial application requirements
- Compatible with glass cover lens up to 2mm thick or plastic cover up to 1mm thick
- Hybrid self-capacitance and mutual-capacitance
- Up to 120Hz report rate
- SNR ≥40dB
- Water-rejection design, support wet-finger operation
- Robust against EFT ±4kV and CS 10V interference
- Built-in noise detection and frequency hopping functionality
- Support 10-finger touch
- Support I²C/SPI communication interfaces

Capacitive Touchscreen Controllers Selection Guide

Part No.	Channels	Screen Size(Inches)	Touch Points	Report Rate(Hz)	Voltage(V)	Package	Package Size(mm)	Communication Interfaces
GSL3775	24TX/12RX	≤ 7	10	120	2.7~3.6	QFN48	6x6x0.55	I²C/SPI
GSL3776	26TX/14RX	≤ 10.1	10	120	2.7~3.6	QFN52	6x6x0.55	I²C/SPI
GSL1680	16TX/10RX	≤ 7	10	80	2.8~3.3	QFN40	5x5x0.8	I²C
GSL3670	26TX/14RX	≤ 10.1	10	80	2.6~3.3	QFN52	6x6x0.8	I²C
GSL3676	28TX/18RX	≤ 10.1	10	80	2.6~3.3	QFN56	7x7x0.8	I²C
GSL3680	31TX/20RX	≤ 10.1	10	80	2.6~3.3	QFN68	8x8x0.8	I²C
GSL5680	42TX/30RX	≤ 15.6	10	80	2.6~3.3	QFN88	10x10x0.8	I²C
GSL2338	40RX	≤ 5.5	2	80	2.6~3.3	QFN48	5x5x0.5	I²C

Capacitive Touchpad Controllers

Gigadevice's touchpad controllers fully comply with Windows OS standards, offering high precision, low power consumption, exceptional anti-interference capability, along with excellent palm rejection and waterproof performance. These products are widely applicable to laptops, keyboard cases, and embedded custom touchpad applications, providing customers with comprehensive, one-stop solutions.

Features of Touchpad Controllers

- Diverse Solutions: Support a wide range of applications, including standard TouchPAD, SecurityPAD, NFC PAD, and Pen PAD and Hover PAD
- Self-capacitance and Mutual-capacitance Integration: Combines self-capacitance and mutual-capacitance functions to meet diverse usage needs
- High Performance: Signal-to-noise ratio (SNR) up to 40dB, ensuring precise touch control experience
- Exceptional Anti-interference Capability: Support EFT 4KV and CS 10V for enhanced stability
- Flexible Adaptation: Offers standard and customized algorithms and protocols to meet various product requirements

Capacitive Touchpad Controllers Selection Guide

Part No.	Voltage(V)	Channels	Communication Interfaces	Touch Points	Touchpad Size(mm)	Package	Package Size(mm)
GSM3766	2.7V~3.6	26TX/14RX	I²C/SPI/HID over I²C	5~10	140*80	QFN52	6x6x0.55
GSM3765	2.7V~3.6	24TX/12RX	I²C/SPI/HID over I²C	5~10	130*65	QFN48	6x6x0.55

Fingerprint Sensors

Capacitive Fingerprint Sensors

- Sensor shapes with various sizes: round/square/rectangular etc.
- Application scenarios: front/back/side of smartphones, tablets, laptops and IoT devices
- Surface materials: matte/glossy/ceramic cover/glass cover etc.
- High sensitivity, high SNR, high quality image
- Image accuracy: 8-bit precision, 256 gray levels
- Support standard SPI interface
- Resolution: 508 DPI
- Adaptive calibration: automatically adjust configuration according to different fingerprints
- Recognition algorithms: finger patterns and feature points etc.
- High-definition fingerprint images can be obtained without a metal ring
- FRR<2% @ FAR 1/50,000
- Supply voltage: 2.8V~3.6V
- VDDIO voltage: 1.8V~AVDD
- Power consumption:
  - Image scan mode (frame rate > 20 F/s or customized): 8.5 mA (configurable)
  - Sleep mode: 100μA (typically)
  - Deep sleep mode: 30~100μA
- ESD performance:
  - Air discharge: ±15.0 kV
  - Direct discharge: ±8.0 kV
- Latch-up performance: ±400.0 mA

PC Fingerprint Sensors Selection Guide

Part No.	Type	Solution	LGA Size / Square(mm)	LGA Size / Round	Thickness (mm)	Sensing Size(mm)	Pixel Array
GSL6150	LGA	MoH (SPI, USB), MOC-I	4x8.5~12x12	Φ8.8~Φ12	0.65	4x3.2	80x64
GSL6157	LGA	MoH (SPI, USB), MOC-I	4x12~7x16	/	0.65	8x1.8	160x36
GSL6192	LGA	MoH (SPI, USB)	13.5x1.8-13.5x2	/	1.24	7.8x1.3	180x30
GSL6186	LGA	MoC	10.5x10.5~13x13	Φ10.5~Φ13	0.68	4x3.2	80x64
GSL6188	LGA	MoC	6.5x13~8.5x17	/	0.72	6.4x3.2	128x64

IoT Fingerprint Sensors Selection Guide

Part No.	Type	Solution	LGA Size / Square(mm)	LGA Size / Round	Thickness (mm)	Sensing Size(mm)	Pixel Array
GSL6150NX8P	LGA	MoH	7.7x7.7~10.5x10.5	Φ9.2~Φ10.5	0.68	4x3.2	80x64
GSL6157N2	LGA	MoH	13.6x2.4	/	1.3	8x1.8	160x36
GSL6186LMSCM1	LGA	MoC	10.5x10.5~12x12	Φ10.5~Φ12	0.68	4x3.2	80x64

Under Display Optical Fingerprint Sensors

- Support both rigid and flexible OLED display screens
- Support minimum transmission rate of 1.5%
- FRR 1.5% @ FAR 1/50,000
- Support a maximum of 12 Enroll times
- 360-degree all-round recognition
- Large-size pixel design for low-light under display fingerprint application
- Advanced single-chip architecture
- A customized optical lens system coupled with adaptive pixel fusion technology enables high-resolution fingerprint imaging
- No flash supported

Under Display Optical Fingerprint Sensors Selection Guide

Part No.	Type	Finger Touch Size(mm)	Typical Application	Sensing Size(mm)	Pixel Array
GSL7001A	KGD	6.0x6.0	IoT	2.0x2.0	250x250
GDM72	Module	7.5x6.8	IoT	1.5x1.35	200x180

Barometric Pressure Sensors

Barometric Pressure Sensors

- Based on MEMS piezoresistive pressure sensing architecture, covering absolute, differential and gauge pressure solutions
- Compatible with both standard and waterproof packages, support 10ATM waferproof
- 24-bit ADC, 0.015Pa pressure resolution and 0.1℃ temperature resolution
- Multiple ranges for diverse application scenarios
- Small size package
- Applications: Consumer electronics, smart home, industrial & IoT

Barometric Pressure Sensors Selection Guide

Part No.	Description	Power Supply(V)	Operation Ranges(hPa)	ADC	Communication Interfaces	Absolute Pressure Accuracy(Typ. hPa)	Sample Rate	Package Size(mm)
GDY1121	Digital Barometric Pressure Sensor	1.8~3.3	300~1250	24-bit	I²C/SPI	±0.5	1Hz ~250Hz	2x2x0.85
GDY1122	Digital Waterproof Barometric Pressure Sensor(10 ATM)	1.8~3.3	300~1250	24-bit	I²C/SPI	±0.5	1Hz ~250Hz	2.7x2.7x1.7
GDY1124	Digital Waterproof Barometric Pressure Sensor(5ATM)	1.8~3.3	300~1100	24-bit	I²C/SPI	±0.5	1Hz ~250Hz	2.7x2.7x1.7
GDY1125	Analog Pressure Sensor	1~10	0~11000	/	/	/	/	2.3x2.6x1.45
GDY1126	Analog Pressure Sensor	1~10	0~15000	/	/	/	/	2.3x2.6x1.45
GDY1151	Analog Gauge Pressure Sensor	1~10	0~400	/	/	/	/	6x6x9.5
GDY1152	Digital Gauge Pressure Sensor	1.8~5.5	0~400	24-bit	I²C	±4	1Hz ~100Hz	7x7x10
GDY1161	Digital Differential Pressure Sensor	1.8~3.6	0~500	24-bit	I²C/SPI	±1	1Hz~200Hz	3.5x2.65x0.95

GigaDevice Semiconductor Inc.

Applications:
www.gigadevice.com.cn/solution

Global Sales Network:
www.gigadevice.com.cn/about/sales

www.gigadevice.com

Follow us on LinkedIn

GigaDevice Website

■ **Beijing (Group Headquarters)**

Building No.8, IC Park, No.9 Fenghao East Road, Haidian, Beijing, China
Tel:+86-10-82881666
Fax:+86-10-82881668
E-mail:info@gigadevice.com

6F, Cheng'Ao Plaza, No.5 Anding Road, Chaoyang District, Beijing
Tel:+86-10-82881666
E-mail:info@gigadevice.com

■ **Shanghai**

Room 603, No.18 Tianshan Rd, Zhaoyi Science Zone,
Changning District, Shanghai,China
Tel:+86-21-32567770
E-mail:info@gigadevice.com

15F, No.505 Zhangjiang Road, Pudong New District, Shanghai, China
Tel:+86-21-20221991
E-mail:info@gigadevice.com

■ **Shenzhen**

36F, Building 10B, Shenzhen Bay Eco-Technology Park, No.10,
9th High-tech Southern Avenue, Nanshan District, Shenzhen, China
Tel:+86-755-83438655
E-mail:info@gigadevice.com

■ **Hefei**

No.368 Qinghua Road, Economic and Technological Development Area,
Hefei, Anhui, China
Tel:+86-551-68999899
E-mail:info@gigadevice.com

■ **Xi'an**

15F, Building G1, Xi'an Huanpu Technology Industrial Park, No.211,
Tiangu 8th Road, Hi-tech Industrial Development Zone, Xi'an, China
Tel:+86-29-88858591
E-mail:info@gigadevice.com

■ **Chengdu**

19F, Building 9, Yintai City Office Building, Wuhou District, Chengdu,
Sichuan Province
Tel:+86-28-89103089
E-mail:info@gigadevice.com

■ **Suzhou**

Room1201-1203, Building N1, 2.5 Industrial Park,
No.88 Dongchang Road, Suzhou, China
Tel:+86-512-87180588
E-mail:info@gigadevice.com

■ **Hsinchu**

6F.-1, No.6, Gaotie E. 2nd Rd., Zhubei City, Hsinchu County 302053,
Taiwan
Tel:+886 3622 3101
E-mail:info@gigadevice.com

■ **Singapore (Global Headquarters)**

12 Marina Boulevard, #35-03/04 Marina Bay Financial Centre
Tower 3, Singapore 018982
Tel: +65-6908-5680
E-mail: info@gigadevice.com

■ **USA**

100 Century Center Ct., Suite 120 San Jose, CA 95112, USA
Tel: +1-408-855-8336
E-mail: usainquiry@gigadevice.com

■ **UK**

Innovation House, Molly Millars Close, Wokingham, Berkshire,
RG41 2RX
Tel: +44-3454531169
E-mail: info@gigadevice.com

■ **Germany**

Altlaufstrasse 42, 85635 Hoehenkirchen-Siegertsbrunn
Tel: +49-8102-9860906
E-mail: info@gigadevice.com

■ **Korea**

706-2, 240 Pangyoyeok-ro, Bundang-gu, Seongnam-si,
Gyeonggi-do, KR 13493
Tel: +82-10-2636-8543 +82-10-2010-6923
E-mail: info@gigadevice.com

■ **Japan**

Atrium Higashi-Shinbashi 6F, 1-1-2 Higashi-Shinbashi, Minato-
ku, Tokyo 105-0021
Tel: +81-3-6281-4330
E-mail: info@gigadevice.com