GD32F310, A New Addition to the GD32F3 MCU Series

The newly launched GD32F310 MCU series further expands the GD32 MCU family value line and enables entry-level application development for industrial control, motor drives, smart homes, LED displays, portable medical devices, home appliances, and more.

The Best Balance Between Performance and Cost

The GD32F310 series adopts the Arm Cortex-M4 core, inherits the excellent performance of the GD32F330/350 MCU series, and undertakes the value-added features of the GD32E230 series.

Compatibility Across Products

The GD32F310 series maintains hardware and software compatibility with the GD32E230, GD32F330, and GD32F350 MCU series, making product switching and migration more flexible. The application note "Migration from GD32E230 Series to GD32F310 Series" is provided to engineers to support rapid design and migration between products.

The GD32F3x0 Series Provides 40 Part Numbers in Three Series and Six Package Options, Including LQFP64, LQFP48, LQFP32, QFN32, QFN28 and TSSOP20

GD32F310
Value 72MHz
Flash 16-64KB
SRAM 4-8KB

GD32F330
Value 84MHz
Flash 16-128KB
SRAM 4-16KB

GD32F350
Value 108MHz
Flash 16-128KB
SRAM 4-16KB

Innovative Solutions Provided by Rich Peripheral Interfaces

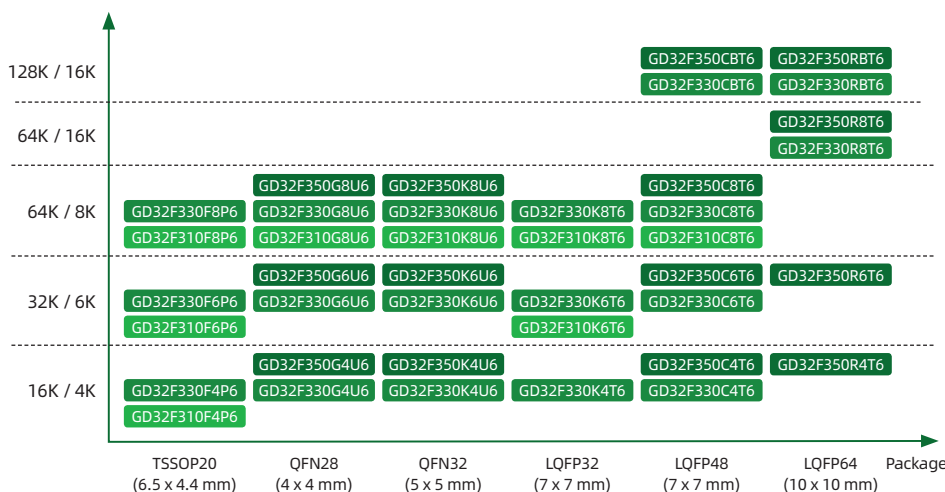| Available on GD32F310 / F350	Available on GD32F330 / F350	Available on GD32F350 only

System

8/28/48MHz HIRC
40KHz LIRC
EXT:4-32MHz/ 32.768KHz
PLL
POR/PDR/LVD
CCU/RCU/PMU

Timers

1x 32bit GP Timer
5x 16bit GP Timer
1x 16bit AD Timer
1x 16bit Basic Timer
IWDG / WWDG
RTC
SysTick

Arm® Cortex®-M4 core
72/84/108 MHz

DSP instruction extension
Floating Point Unit (FPU)
NVIC
SWJ-DP

Up to 7-CH DMA

Peripherals

Max 55 GPIOs
Touch sensing interface (TSI)

Memory

128 KB Flash
16 KB SRAM

Connectivity

2x USART
2x I²S
2x SPI
1x I²S
1x HDMI-CEC
1x USB OTG
2x Comparator

Analog

1x 12bit ADC
1x 12bit DAC

GD32F310/F330/F350 Value Portfolio

Flash / SRAM Size (Bytes)

Flash / SRAM	TSSOP20 (6.5 x 4.4 mm)	QFN28 (4 x 4 mm)	QFN32 (5 x 5 mm)	LQFP32 (7 x 7 mm)	LQFP48 (7 x 7 mm)	LQFP64 (10 x 10 mm)
128K / 16K			GD32F350CBT6 / GD32F330CBT6			GD32F350RBT6 / GD32F330RBT6
64K / 16K					GD32F350R8T6 / GD32F330R8T6	
64K / 8K	GD32F330F8P6 / GD32F310F8P6	GD32F350G8U6 / GD32F330G8U6 / GD32F310G8U6	GD32F350K8U6 / GD32F330K8U6 / GD32F310K8U6	GD32F330K8T6 / GD32F310K8T6	GD32F350C8T6 / GD32F330C8T6 / GD32F310C8T6	
32K / 6K	GD32F330F6P6 / GD32F310F6P6	GD32F350G6U6 / GD32F330G6U6	GD32F350K6U6 / GD32F330K6U6	GD32F330K6T6 / GD32F310K6T6	GD32F350C6T6 / GD32F330C6T6	GD32F350R6T6
16K / 4K	GD32F330F4P6 / GD32F310F4P6	GD32F350G4U6 / GD32F330G4U6	GD32F350K4U6 / GD32F330K4U6	GD32F330K4T6	GD32F350C4T6 / GD32F330C4T6	GD32F350R4T6

Package

Development tools

Board Type	Order Code	Onboard Part Number
Eval Board	GD32350R-EVAL	GD32F350R8T6
Starter Kit	GD32350C-START	GD32F350C8T6
Starter Kit	GD32350G-START	GD32F350G8U6
Starter Kit	GD32330C-START	GD32F330C8T6
Starter Kit	GD32330K-START	GD32F330K8T6
Starter Kit	GD32330G-START	GD32F330G8U6
Starter Kit	GD32330F-START	GD32F330F8P6
Eval Board	GD32F310C-EVAL	GD32F310C8T6
Starter Kit	GD32F310K-START	GD32F310K8T6
Starter Kit	GD32F310G-START	GD32F310G8U6
Starter Kit	GD32F310F-START	GD32F310F8P6

The full-featured **Evaluation Boards** support application development and debugging, demonstrating the complete functional capabilities of the device.

The entry-level **Starter Kits** correspond to different package types. They support simpler application development and debugging.

For more information on GD32 MCU products and solutions, visit **GD32MCU.com/en**

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[GigaDevice](#):

[GD32F310G8U6](#) [GD32F310C8T6](#) [GD32F310K8U6](#) [GD32F310F4P6](#) [GD32F310F6P6](#) [GD32F310F8P6](#) [GD32F310K8T6](#) [GD32F310G8U6TR](#) [GD32F310C8T7](#) [GD32F310F4P6TR](#) [GD32F310F6P6TR](#) [GD32F310F8P6TR](#) [GD32F310K8T7](#) [GD32F310K-START](#) [GD32F310G-START](#) [GD32F310F-START](#) [GD32F310C-EVAL](#)