



GD32A503 series of 32-bit ARM[®] Cortex[®]-M33 MCUs Selection Guide

| es | | Max Speed | | Memo | ry (Byte | es) | | | | | | | | | | | Connectiv | vity | | | Analog Ir | nterface | |
|----------|--------------|-----------|------|------|----------------|--------|----------|-----------------|---------------------|---------------------|--------------------|-----|-----|---------------|------------------|-----|-----------|------------------|------|-------|--------------------------|--------------------|---------|
| Series | Part No. | (MHz) | | SRAM | Data- Flash | EEPROM | I/O | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART /LIN | I ² C | SPI | CAN2.0B | I ² S | СОМР | мғсом | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 23 | 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 |
| A50 | 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 |
| GD32A503 | 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 |
| ত | 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 |





GD32W515 series of 32-bit ARM[®] Cortex[®]-M33 MCUs Selection Guide

| ies | Book No. | Max | Memory | (Bytes) | L/O | | | | Timer | | | | | | | | | Conr | nectivity | | | | | Analog | Interface | Bullion |
|------|--------------|-------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|-------|------------------|-----|---------------|------------------|------|----------------|------|-----------------|-------------------|----------------|--------------------------|------------------|---------|
| Ser | Part No. | (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART | I ² C | SPI | USB 2.0 FS | I ² S | SDIO | IEEE 802.11 | QSPI | Digital filters | Digital Camera | HW Security | 12bit ADC Units (CHs) | Cap.Touch Key | Package |
| 2 | 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 |
| W51 | 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 |
| GD32 | 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 |
| Ō | 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 |





GD32L233 series of 32-bit ARM[®] Cortex[®]-M23 MCUs Selection Guide

| es | 5 | Max | Memory | (Bytes) | Wo. | | | | Timer | | | | | | | Con | nectivity | | | | Analog Ir | nterface | |
|--------|--------------|----------------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|---------------|------------|------------------|-----|-----------|------------------|------|----------------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | LPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USAR +UART | LP UART | I ² C | SPI | USB 2.0 | I ² S | Comp | Segment LCD | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| က | 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 |
| 1.233 | 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 |
| GD32L | 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 |
| G | 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 |
| | 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 |





GD32E5 series of 32-bit ARM[®] Cortex[®]-M33 MCUs Selection Guide

| es | | Max | Memoi | ry (Bytes) | | | | | Timer | | | | | | | | | Connect | ivity | | | | | Analog I | nterface | |
|--------------|--------------|----------------|-------|------------------|-----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------|-----------------------|-----------|-----|-------|------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 | I ² S SDIO | Ether-net | TMU | HRTIM | СОМР | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| က | 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 |
| E50 | 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 |
| GD32E503 | 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 |
| 0 | 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 |
| | 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 |
| 202 | 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 |
| GD32E505 | 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 |
| GD | 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 |
| | 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 |
| <u>_</u> | 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 |
| GD32E507 | 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 |
| 3D32 | 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 |
| O | 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 |
| 208 | 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 |
| GD32E508 | 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 |
| GD32E PRT | GD32EPRTRDT6 | 180 | 384K | 96K+4MB PSRAM | up to 51 | 1 | 3 | 2 | 2 | 1 | 2 | 1 | 3+3 | 3 | 3 | | FS | 2 | • | | | | | 3(16) | 2 | LQFP64 |
| GD R | GD32EPRTVDT6 | 180 | 384K | 96K+4MB PSRAM | up to 80 | 1 | 3 | 2 | 2 | 1 | 2 | 1 | 3+3 | 3 | 3 | | FS | 2 | • | | | | • | 3(16) | 2 | LQFP100 |





GD32E23x series of 32-bit ARM[®] Cortex[®]-M23 MCUs Selection Guide

| | | Man | Memory | (Bytes) | | | | | Timer | | | | | | | Connectiv | rity | | | Analog | Interface | |
|----------|----------------|-----------------------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|-------|----|-----|---------------|------|------|------------|-----------------------------|--------------------|---------|
| Series | Part No. | Max Speed (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART | ľC | SPI | USB 2.0 FS | l²S | Comp | OP- AMP | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| | GD32E230G4U6TR | 72 | 16K | 4K | up to 23 | | 4 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1(10) | | QFN28 |
| 0 | GD32E230G6U6TR | 72 | 32K | 6K | up to 23 | | 4 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | 1 | 1 | | 1(10) | | QFN28 |
| GD32E230 | GD32E230G8U6TR | 72 | 64K | 8K | up to 23 | | 5 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | 1 | | 1(10) | | QFN28 |
| 3D32 | GD32E230K4U6 | 72 | 16K | 4K | up to 27 | | 4 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1(10) | | QFN32 |
| O | 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 |
| | GD32E232E4U7TR | 72 | 16K | 4K | up to 18 | 1 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | | 1 | | | 1(9) | 4 | QFN24 |
| Ŋ | GD32E232E6U7TR | 72 | 32K | 6K | up to 18 | 1 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | | 1 | | | 1(9) | 4 | QFN24 |
| E23 | GD32E232E8U7TR | 72 | 64K | 8K | up to 18 | 1 | 5 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | | | 1(9) | 4 | QFN24 |
| GD32E232 | GD32E232K4Q7TR | 72 | 16K | 4K | up to 28 | 1 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | | 1 | | | 1(16) | 4 | QFN32 |
| 0 | GD32E232K6Q7TR | 72 | 32K | 6K | up to 28 | 1 | 4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | | 1 | | | 1(16) | 4 | QFN32 |
| | GD32E232K8Q7TR | 72 | 64K | 8K | up to 28 | 1 | 5 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | | | 1(16) | 4 | QFN32 |





GD32VF103 series of 32-bit RISC-V MCUs Selection Guide

| Ñ | | Max | Memory | (Bytes) | | | | Tin | ner | | | | | | Con | nectivity | | | | | Analog lı | nterface | |
|-----------|---------------|----------------|--------|---------|----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | l ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 8 | GD32VF103C6T6 | 108 | 32K | 10K | up to 37 | 2 | 1 | 2 | 1 | 2 | 1 | 2+0 | 1 | 1 | 2 | OTG | | | | | 2(10) | 2 | LQFP48 |
| VF10 | GD32VF103C8T6 | 108 | 64K | 20K | up to 37 | 4 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | 2 | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| GD32VF103 | GD32VF103CBT6 | 108 | 128K | 32K | up to 37 | 4 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | 2 | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| Ō | 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 |





GD32E1/C1 series of 32-bit ARM[®] Cortex[®]-M4 MCUs Selection Guide

| v | | Max | Memory | (Bytes) | | | | Tin | ner | | | | | | Coni | nectivity | | | | | Analog lı | nterface | |
|--------------|--------------|----------------|--------|---------|----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | l ² C | SPI | CAN 2.0B | USB 2.0 FS | I ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| က | GD32E103C8T6 | 120 | 64K | 20K | up to 37 | 10 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| GD32E103 | GD32E103CBT6 | 120 | 128K | 32K | up to 37 | 10 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| D32 | GD32E103R8T6 | 120 | 64K | 20K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 3+2 | 2 | 3 | | OTG | 2 | | | | 2(16) | 2 | LQFP64 |
| О | 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 |
| е е | 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 |
| GD32C103 | 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 |
| D32(| 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 |
| Ō | 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 |
| | 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 |
| <u>e</u> | GD32E113C8T6 | 120 | 64K | 20K | up to 37 | 10 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| GD32E113 | GD32E113CBT6 | 120 | 128K | 32K | up to 37 | 10 | 1 | 2 | 1 | 2 | 1 | 3+0 | 2 | 3 | | OTG | 2 | | | | 2(10) | 2 | LQFP48 |
| 3D3 | GD32E113R8T6 | 120 | 64K | 20K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 3+2 | 2 | 3 | | OTG | 2 | | | | 2(16) | 2 | LQFP64 |
| O | 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 |
| <u>&</u> | 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 |
| GD32C113 | 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 |
| GD3 | 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 |





GD32F4 series of 32-bit ARM[®] Cortex[®]-M4F MCUs Selection Guide

| vo | | Max | Memory | (Bytes) | | | | Ti | mer | | | | | | | | Conne | ctivity | | | | | =>// | Analog l | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|-------------------|-----------------|---------------------|-----|-----|----------------|------------------|-----|-------------|------------|------------------|---------|---------------------|--------|------------|-----|-------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Adv TM (16bit) | GPTM (32bit) | Basic TM (16bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB OTG | I ² S | SDIO | LCD- SDIO TFT | Camera | ETH MAC | IPA | SDRAM | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 425 | 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 |
| GD32F425 | 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 |
| GD | 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 |
| | 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 |
| 427 | 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 |
| GD32F427 | 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 |
| 뮹 | 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 |
| | 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 |
| 0 | 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 |
| GD32F470 | 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 |
| 3D3 | 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 |
| O | 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 |





GD32F4 series of 32-bit ARM[®] Cortex[®]-M4F MCUs Selection Guide

| v | | Max | Memory | (Bytes) | | | | Ti | mer | | | | | | | | Conne | ctivity | | | | | | Analog | Interface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|-------------------|-----------------|---------------------|-----|-----|----------------|------------------|-----|-------------|------------|------------------|---------|---------------------|--------|------------|-----|----------------|-----------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Adv TM (16bit) | GPTM (32bit) | Basic TM (16bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB OTG | I ² S | SDIO | LCD- SDIO TFT | Camera | ETH MAC | IPA | EXMC/ SDRAM | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| တ္ | 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 |
| GD32D403 | 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 |
| D32 | 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 |
| G | 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 |
| | 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 |
| 105 | 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 |
| GD32F405 | 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 |
| GD | 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 |





GD32F4 series of 32-bit ARM® Cortex®-M4F MCUs Selection Guide

| W | | Max | Memory | (Bytes) | | | | Tir | ner | | | | | | | | Conne | ctivity | | | | | | Analog I | nterface | |
|-----------|--------------|----------------|--------|---------|-----------|-----------------|-------------------|-----------------|---------------------|-----|-----|----------------|------------------|-----|-------------|------------|-------|---------|---------------------|--------|------------|-----|----------------|-----------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Adv TM (16bit) | GPTM (32bit) | Basic TM (16bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB OTG | l²S | SDIO | LCD- SDIO TFT | Camera | ETH MAC | IPA | EXMC/ SDRAM | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 407 | 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 |
| GD32F407 | 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 |
| G | 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 |
| | 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 |
| -450 | 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 |
| GD32F450 | 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 |
| <u>15</u> | 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 |





GD32F30x series of 32-bit ARM® Cortex®-M4 MCUs Selection Guide

| တ | | Max | Memory | (Bytes) | | | | Tin | ner | | | | | | Con | nectivity | | | | | Analog lı | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|-----|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I²C | SPI | CAN 2.0B | USB 2.0 FS | I ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 303 | GD32F303RKT6 | 120 | 3072K | 96K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 1 | 1 | 2 | 1 | | | 3(16) | 2 | LQFP64 |
| GD32F303 | GD32F303VBT6 | 120 | 128K | 32K | up to 80 | 4 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 1 | 1 | 2 | | | • | 3(16) | 2 | LQFP100 |
| GD | 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 |
| | 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 |
| Ŋ | GD32F305RGT6 | 120 | 1024K | 96K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | | | 2(16) | 2 | LQFP64 |
| GD32F305 | GD32F305VCT6 | 120 | 256K | 96K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | | • | 2(16) | 2 | LQFP100 |
| D32 | GD32F305VET6 | 120 | 512K | 96K | up to 80 | 4 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | | • | 2(16) | 2 | LQFP100 |
| G | 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 |





GD32F30x series of 32-bit ARM® Cortex®-M4 MCUs Selection Guide

| S | | Max | Memory | (Bytes) | | | | Tir | ner | | | | | | Con | nectivity | | | | | Analog I | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | I ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 307 | GD32F307VCT6 | 120 | 256K | 96K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | • | • | 2(16) | 2 | LQFP100 |
| GD32F307 | GD32F307VET6 | 120 | 512K | 96K | up to 80 | 4 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | • | • | 2(16) | 2 | LQFP100 |
| G | 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 |





GD32F3x0 series of 32-bit ARM[®] Cortex[®]-M4 MCUs Selection Guide

| | | | Memory | (Bytes) | | | | | Timer | | | | | | | Connectiv | ity | | | Analog | Interface | |
|----------|----------------|-----------------------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|-------|-----|-----|---------------|------------------|-----|------|-----------------------------|--------------------|---------|
| Series | Part No. | Max Speed (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART | I²C | SPI | USB 2.0 FS | l ² S | CEC | Comp | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 0 | GD32F310F8P6TR | 72 | 64K | 8K | up to 15 | | 4 | 1 | | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | | | 1(9) | | TSSOP20 |
| GD32F310 | GD32F310G8U6TR | 72 | 64K | 8K | up to 23 | | 5 | 1 | | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | | | 1(10) | | QFN28 |
| D32 | GD32F310K8U6 | 72 | 64K | 8K | up to 27 | | 5 | 1 | | 1 | 2 | 1 | 2 | 2 | 2 | | 1 | | | 1(10) | | QFN32 |
| О | 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 |
| | 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 |
| 0 | GD32F330K6U6 | 84 | 32K | 4K | up to 27 | 1 | 4 | 1 | | 1 | 2 | 1 | 2 | 1 | 1 | | | | | 1(10) | | QFN32 |
| F33(| GD32F330K8U6 | 84 | 64K | 8K | up to 27 | 1 | 5 | 1 | | 1 | 2 | 1 | 2 | 2 | 2 | | | | | 1(10) | | QFN32 |
| GD32F330 | GD32F330K4T6 | 84 | 16K | 4K | up to 25 | 1 | 4 | 1 | | 1 | 2 | 1 | 1 | 1 | 1 | | | | | 1(10) | | LQFP32 |
| G | 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 |





GD32F3x0 series of 32-bit ARM[®] Cortex[®]-M4 MCUs Selection Guide

| | | May | Memory | (Bytes) | | | | | Timer | | | | | | | Connectiv | ity | | | Analog | Interface | |
|----------|----------------|-----------------------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|-------|------------------|-----|---------------|-----|-----|------|-----------------------------|--------------------|---------|
| Series | Part No. | Max Speed (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART | I ² C | SPI | USB 2.0 FS | l²S | CEC | Comp | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 0 | 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 |
| GD32F350 | 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 |
| D32 | 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 |
| O | 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 |





GD32F2 series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

| es | | Max | Memory | (Bytes) | | | | Tim | ner | | | | | | | | Conne | ctivity | | | | | EXMC/ | Analog lı | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|-------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|---------|-------------|--------|------------|-----------------|-------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Adv TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | I ² S | SDIO | LCD- TFT | Camera | ETH MAC | Crypto/ Hash | SDRAM | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| δ | 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 |
| 2F20 | 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 |
| GD32F205 | 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 |
| J | 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 |
| | 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 |
| 207 | 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 |
| GD32F207 | 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 |
| 9 | 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 |





GD32F10x series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

| W | | Max | Memory | (Bytes) | | | | Tin | ner | | | | | | Con | nectivity | | | | | Analog Ir | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | l ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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) | 2 | LQFP64 |
| | GD32F101RDT6 | 56 | 384K | 48K | up to 51 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 1(16) | 2 | LQFP64 |
| | GD32F101RET6 | 56 | 512K | 48K | up to 51 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 1(16) | 2 | LQFP64 |
| | GD32F101RFT6 | 56 | 768K | 80K | up to 51 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 2(16) | 2 | LQFP64 |
| 101 | GD32F101RGT6 | 56 | 1024K | 80K | up to 51 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 2(16) | 2 | LQFP64 |
| GD32F101 | GD32F101RIT6 | 56 | 2048K | 80K | up to 51 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 2(16) | 2 | LQFP64 |
| G | GD32F101RKT6 | 56 | 3072K | 80K | up to 51 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | | 2(16) | 2 | 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) | 2 | LQFP100 |
| | GD32F101VDT6 | 56 | 384K | 48K | up to 80 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 1(16) | 2 | LQFP100 |
| | GD32F101VET6 | 56 | 512K | 48K | up to 80 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 1(16) | 2 | LQFP100 |
| | GD32F101VFT6 | 56 | 768K | 80K | up to 80 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP100 |
| | GD32F101VGT6 | 56 | 1024K | 80K | up to 80 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP100 |
| | GD32F101VIT6 | 56 | 2048K | 80K | up to 80 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP100 |
| | GD32F101VKT6 | 56 | 3072K | 80K | up to 80 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP100 |
| | GD32F101ZCT6 | 56 | 256K | 32K | up to 112 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 1(16) | 2 | LQFP144 |
| | GD32F101ZDT6 | 56 | 384K | 48K | up to 112 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 1(16) | 2 | LQFP144 |
| | GD32F101ZET6 | 56 | 512K | 48K | up to 112 | 4 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 1(16) | 2 | LQFP144 |
| | GD32F101ZFT6 | 56 | 768K | 80K | up to 112 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP144 |
| | GD32F101ZGT6 | 56 | 1024K | 80K | up to 112 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP144 |
| | GD32F101ZIT6 | 56 | 2048K | 80K | up to 112 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP144 |
| | GD32F101ZKT6 | 56 | 3072K | 80K | up to 112 | 10 | | 2 | 1 | 2 | 1 | 5 | 2 | 3 | | | | | | • | 2(16) | 2 | LQFP144 |





GD32F10x series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

| (0 | | Max | Memory | (Bytes) | | | | Tin | ner | | | | | | Con | nectivity | | | | | Analog Ir | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|-----|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | l²S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 103 | GD32F103RGT6 | 108 | 1024K | 96K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 1 | 1 | 2 | 1 | | | 3(16) | 2 | LQFP64 |
| GD32F103 | GD32F103RIT6 | 108 | 2048K | 96K | up to 51 | 10 | 2 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 1 | 1 | 2 | 1 | | | 3(16) | 2 | LQFP64 |
| G | 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 |





GD32F10x series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

| (0 | | Max | Memory | (Bytes) | | | | Tir | ner | | | | | | Con | nectivity | | | | | Analog lı | nterface | |
|----------|--------------|----------------|--------|---------|-----------|-----------------|----------------------------|---------------------|--------------------|-----|-----|----------------|------------------|-----|-------------|---------------|------------------|------|---------------|------|--------------------------|--------------------|---------|
| Series | Part No. | Speed (MHz) | Flash | SRAM | I/O | GPTM (16bit) | Advanc ed TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART +UART | I ² C | SPI | CAN 2.0B | USB 2.0 FS | I ² S | SDIO | Ether- net | EXMC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 105 | GD32F105VBT6 | 108 | 128K | 64K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | | • | 2(16) | 2 | LQFP100 |
| GD32F105 | GD32F105VCT6 | 108 | 256K | 96K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | | • | 2(16) | 2 | LQFP100 |
| GD | 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 |
| | 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 |
| 107 | GD32F107VCT6 | 108 | 256K | 96K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 1 | 3 | 2 | OTG | 2 | | • | • | 2(16) | 2 | LQFP100 |
| GD32F107 | GD32F107VDT6 | 108 | 384K | 96K | up to 80 | 4 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 3 | 2 | OTG | 2 | | • | • | 2(16) | 2 | LQFP100 |
| GD | 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 |





GD32F1x0 series of 32-bit ARM[®] Cortex[®]-M3 MCUs Selection Guide

| | | | Memory | (Bytes) | | | | | Timer | | | | | | Con | nectivity | | | Analog | Interface | |
|----------|----------------|-----------------------|--------|---------|----------|-----------------|-----------------|------------------------|---------------------|--------------------|-----|-----|-------|------------------|-----|---------------|------------------|-----|--------------------------------|--------------------|---------|
| Series | Part No. | Max Speed (MHz) | Flash | SRAM | I/O | GPTM (32bit) | GPTM (16bit) | Advanced TM (16bit) | Basic TM (16bit) | SysTick (24bit) | WDG | RTC | USART | I ² C | SPI | USB 2.0 FS | I ² S | CEC | 12bit ADC Units (CHs) | 12bit DAC Units | Package |
| | 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 |
| 9 | GD32F130K4T6 | 48 | 16K | 4K | up to 27 | 1 | 4 | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 1(10) | | LQFP32 |
| PF13 | GD32F130K6T6 | 48 | 32K | 4K | up to 27 | 1 | 4 | | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | | 1(10) | | LQFP32 |
| GD32F130 | GD32F130K8T6 | 48 | 64K | 8K | up to 27 | 1 | 5 | | 1 | 1 | 2 | 1 | 2 | 2 | 2 | | | | 1(10) | | LQFP32 |
| O | 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 |
| | 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 |
| 0 | GD32F150K6U6 | 72 | 32K | 6K | up to 27 | 1 | 5 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1(10) | 1 | QFN32 |
| GD32F150 | GD32F150K8U6 | 72 | 64K | 8K | up to 27 | 1 | 5 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1(10) | 1 | QFN32 |
| D32 | GD32F150C4T6 | 72 | 16K | 4K | up to 39 | 1 | 5 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1(10) | 1 | LQFP48 |
| O | 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 |