



INTEL® MAX® 10 FPGAS PRODUCT TABLE

| PRODUCT LINE | | 10M02 | 10M04 | 10M08 | 10M16 | 10M25 | 10M40 | 10M50 |
|---|-----------------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| LEs (K) | | 2 | 4 | 8 | 16 | 25 | 40 | 50 |
| Block memory (Kb) | | 108 | 189 | 378 | 549 | 675 | 1,260 | 1,638 |
| User flash memory ¹ (KB) | | 12 | 16 – 156 | 32 – 172 | 32 – 296 | 32 – 400 | 64 – 736 | 64 – 736 |
| 18 x 18 multipliers | | 16 | 20 | 24 | 45 | 55 | 125 | 144 |
| Phase-locked loops (PLLs) ² | | 1, 2 | 1, 2 | 1, 2 | 1, 4 | 1, 4 | 1, 4 | 1, 4 |
| Internal configuration | | Single | Dual | Dual | Dual | Dual | Dual | Dual |
| Analog-to-digital converter (ADC), temperature sensing diode (TSD) ³ | | - | 1, 1 | 1, 1 | 1, 1 | 2, 1 | 2, 1 | 2, 1 |
| External memory interface (EMIF) | | Yes ⁴ | Yes ⁴ | Yes ⁴ | Yes ⁵ | Yes ⁵ | Yes ⁵ | Yes ⁵ |
| Package Options and I/O Pins: Feature Set Options, GPIO, True LVDS Transceiver/Receiver | | | | | | | | |
| Dual Power Supply | V36 (D) ⁶ | WLCSP (3 mm, 0.4 mm pitch) | C, 27, 3/7 | - | - | - | - | - |
| | V81 (D) ⁷ | WLCSP (4 mm, 0.4 mm pitch) | - | - | C/F, 56, 7/17 | - | - | - |
| | F256 (D) | FBGA (17 mm, 1.0 mm pitch) | - | C/A, 178, 13/54 | C/A, 178, 13/54 | C/A, 178, 13/54 | C/A, 178, 13/54 | C/A, 178, 13/54 |
| | U324 (D) | UBGA (15 mm, 0.8 mm pitch) | C, 160, 9/47 | C/A, 246, 15/81 | C/A, 246, 15/81 | C/A, 246, 15/81 | - | - |
| | F484 (D) | FBGA (23 mm, 1.0 mm pitch) | - | - | C/A, 250, 15/83 | C/A, 320, 22/116 | C/A, 360, 24/136 | C/A, 360, 24/136 |
| | F672 (D) | FBGA (27 mm, 1.0 mm pitch) | - | - | - | - | - | C/A, 500, 30/192 |
| Single Power Supply | E144 (S) ⁶ | EQFP (22 mm, 0.5 mm pitch) | C, 101, 7/27 | C/A, 101, 10/27 | C/A, 101, 10/27 | C/A, 101, 10/27 | C/A, 101, 10/27 | C/A, 101, 10/28 |
| | M153 (S) | MBGA (8 mm, 0.5 mm pitch) ⁸ | C, 112, 9/29 | C/A, 112, 9/29 | C/A, 112, 9/29 | - | - | - |
| | U169 (S) | UBGA (11 mm, 0.8 mm pitch) | C, 130, 9/38 | C/A, 130, 9/38 | C/A, 130, 9/38 | C/A, 130, 9/38 | - | - |
| | U324 (S) | UBGA (15 mm, 0.8 mm pitch) | C, 246, 15/81 | C/A, 246, 15/81 | C/A, 246, 15/81 | C/A, 246, 15/81 | - | - |

Notes:

- Additional user flash may be available, depending on configuration options.
- The number of PLLs available is dependent on the package option.
- Availability of the ADC or TSD varies by package type. Smaller pin-count packages do not have access to the ADC hard IP.
- SRAM only.
- SRAM, DDR3 SDRAM, DDR2 SDRAM, or LPDDR2.
- "D" = Dual power supply (1.2 V/2.5 V), "S" = Single power supply (3.3 V or 3.0 V).
- V81 package does not support analog feature set. 10M08 V81 F devices support dual image with RSU.
- "Easy PCB" utilizes 0.8 mm PCB design rules.
- All data is correct at the time of printing, and may be subject to change without prior notice. For the latest information, please visit www.altera.com.

C, 27, 3/7 Indicates feature set options, GPIO count, and LVDS transmitter or receiver count. Feature set options: C = Compact (single image), F = Flash (dual image with RSU), A = Analog (analog features block). Each has added premiums.

Indicates pin migration.