

Altera and Xilinx FPGA / SoC Table

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| Vendor | FPGA / SoC Family | Release Year | Transistor Size | Process Technology (PT) |
|--------|--------------------------------------|--------------|-----------------|--|
| Altera | Agilex 7 M Series | 2022 | 7 nm | Intel 7 |
| Xilinx | Versal | 2020 | 7 nm | TSMC 7 nm FinFET |
| Altera | Agilex 5 | 2022 | 7 nm | Intel 7 |
| Altera | Agilex 3 | 2024 | 7 nm | Intel 7 |
| Altera | Agilex 7 F and I Series | 2022 | 10 nm | Intel 10 nm SuperFin |
| Altera | Stratix 10 | 2013 | 14 nm | Intel 14 nm Tri-gate FinFET |
| Xilinx | UltraScale+ | 2016 | 16 nm | TSMC 16nm FinFET+ |
| Altera | Cyclone 10 GX | 2017 | 20 nm | TSMC 20 nm |
| Xilinx | UltraScale | 2014 | 20 nm | TSMC 20 nm |
| Altera | Arria 10 | 2013 | 20 nm | TSMC 20 nm |
| Xilinx | 7 Series (Artix/ Kintex/Virtex 7) | 2010 | 28 nm | TSMC 28-nm HPL (High-Performance, Low-power) |
| Altera | Stratix V | 2010 | 28 nm | TSMC 28 nm |
| Altera | Cyclone V | 2011 | 28 nm | TSMC 28-nm Low-power (28LP) |
| Xilinx | Virtex 6 | 2009 | 40 nm | Copper CMOS |
| Altera | Stratix IV | 2008 | 40 nm | TSMC 40-nm |
| Xilinx | Spartan 6 | 2009 | 45 nm | Dual-oxide |
| Altera | MAX 10 (Non-volatile) | 2014 | 55 nm | TSMC Embedded NOR Flash Technology |
| Altera | Cyclone 10 LP (Low-Power) | 2019 | 60 nm | TSMC Low-κ Dielectric |
| Altera | Cyclone IV | 2009 | 60 nm | TSMC Low-κ Dielectric |
| Xilinx | Virtex 5 | 2006 | 65 nm | Triple-oxide |
| Altera | Stratix III | 2006 | 65 nm | Strained Silicon |
| Altera | Cyclone III | 2007 | 65 nm | Triple-oxide |
| Xilinx | Virtex 4 | 2004 | 90 nm | UMC Low-κ/FGS |
| Xilinx | Spartan 3 | 2004 | 90 nm | UMC Low-κ/FGS |
| Altera | Stratix II | 2004 | 90 nm | Multi-Threshold Transistors |
| Altera | Cyclone II | 2004 | 90 nm | Variable Gate-Length Transistors |

Note: All the FPGA families above are SRAM-based and require an external non-volatile memory for configuration/boot-up except **Altera MAX 10**. It includes a flash memory, therefore it does not require an external non-volatile memory for configuration/boot-up.