3U CompactPCI/PlusIO CPU Cards

Intel Processors

	Type	CPU	Performance Scalability	CompactPCI/ PlusIO	Memory max.	Interfaces	Intel Technology	Local Extensions	Software
F75P	Safe SBC with onboard dual redundancy (see also compare chart safe computers)	3x Intel Atom E6xx (two Control Processors, one I/O Processor)	**Low end**: 0.6 GHz, 3.3 W typ. **High end**: 1.6 GHz, 4.5 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	2 GB + 2x 1 GB DDR2 DRAM (soldered), mSATA disk, 8 KB non-volatile FRAM	**Standard front I/O**: VGA, 2 Fast Ethernet, 2 USB 2.0 **Standard rear I/O**: 1 PCIe, 4 USB, 1 SATA, 2 Fast Ethernet	Functions like Hyperthreading disabled for deterministic behavior		QNX, Linux, VxWorks, VxWorks/ Cert, PikeOS
F23P	SBC	Intel Core i7, up to i7-4700EQ, 4th generation, (64-bit CPU)	**Low end**: 1.5 GHz, 25 W typ. **High end**: 2.4 GHz, 47 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	16 GB DDR3 DRAM (soldered), mSATA disk, microSD card	**Standard front I/O**: VGA, 2 Gb Ethernet, 2 USB 2.0 **Standard rear I/O**: 4 PCIe, 4 USB, 4 SATA, 1 Gb Ethernet **Other I/O** (onboard, side card): SATA, HD audio, USB, UART etc.	Hyperthreading, VT, AMT, Turbo Boost	I/O extension cards: F6xx see compare chart 3U CompactPCI / PlusIO extension cards	Windows, Linux
F22P	SBC	Intel Core i7, up to i7-3615QE, 3rd generation, (64-bit CPU)	**Low end**: 1.5 GHz, 17 W typ. **High end**: 2.3 GHz, 45 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	16 GB DDR3 DRAM (soldered), mSATA disk, microSD card	**Standard front I/O**: VGA, 2 Gb Ethernet, 2 USB 2.0 **Standard rear I/O**: 4 PCIe, 4 USB, 4 SATA, 1 Gb Ethernet **Other I/O** (onboard, side card): SATA, SDVO, HD audio, USB, UART etc.	Hyperthreading, VT, AMT, Turbo Boost	I/O extension cards: F6xx see compare chart 3U CompactPCI / PlusIO extension cards	Windows, Linux
F21P	SBC	Intel Core i7, up to i7-2715QE, 2nd generation, (64-bit CPU)	**Low end**: 1.1 GHz, 17 W typ. **High end**: 2.1 GHz, 45 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	16 GB DDR3 DRAM (soldered), mSATA disk, microSD card	**Standard front I/O**: VGA, 2 Gb Ethernet, 2 USB 2.0 **Standard rear I/O**: 4 PCIe, 4 USB, 4 SATA, 1 Gb Ethernet **Other I/O** (onboard, side card): SATA, SDVO, HD audio, USB, UART etc.	Hyperthreading, VT, AMT, Turbo Boost	I/O extension cards: F6xx see compare chart 3U CompactPCI / PlusIO extension cards	Windows, Linux

Compare Chart

3U CompactPCI/PlusIO CPU Cards

	Type	CPU	Performance Scalability	CompactPCI/ PlusIO	Memory max.	Interfaces	Intel Technology	Local Extensions	Software
F19P	SBC	Intel Core 2 Duo up to SP9300 (64-bit CPU)	**Low end**: 1.2 GHz, 5.5 W typ. **High end**: 2.26 GHz, 25 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	4 GB DDR3 DRAM (soldered), CompactFlash, microSD card	**Standard front I/O**: VGA, 2 Gb Ethernet, 2 USB 2.0 **Standard rear I/O**: 4 PCIe, 4 USB, 4 SATA, 1 Gb Ethernet **Other I/O** (onboard, side card): SATA, SDVO, HD audio, USB, UART etc.	VT	I/O extension cards: F6xx see compare chart 3U CompactPCI / PlusIO extension cards	Windows, Linux
F26L	SBC	Intel Atom Apollo Lake-I E3900 Series	**Low end**: 1.3 GHz, 6.5 W typ. **High end**: 1.6 GHz, 12 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or CompactPCI PlusIO PICMG 2.30 or stand-alone	8 GB DDR3 DRAM (soldered), microSD card, mSATA disk	**Standard front I/O**: VGA, 2 Gb Ethernet, 2 USB 3.0 **Standard rear I/O**: 4 PCIe, 4 USB, 2 Gb Ethernet **Other I/O** (onboard, side card): SATA, DisplayPort, HD audio, USB, PCIe	VT	I/O extension cards: F6xx see compare chart 3U CompactPCI / PlusIO extension cards	Windows 10, Linux, VxWorks (on request), QNX (on request)
F11S	SBC	Intel Atom up to Z530P	**Low end**: 1.1 GHz, tbd W typ. **High end**: 1.6 GHz, 2 W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot	2 GB DDR2 DRAM, 2 MB SRAM, CompactFlash, microSD card	**Standard front I/O**: VGA, 1 Gb Ethernet, 1 Fast Ethernet, 2 USB 2.0, 1 COM, 1 PS/2 **Other I/O**: 1 UART, FPGA (Altera Arria or Altera Cyclone) for user-defined I/O functions			Windows, Linux

Compare Chart

PowerPC Processors

	Type	CPU	Performance Scalability	CompactPCI/ PlusIO	Memory max.	Interfaces	Software
F50P	SBC	PowerPC up to MPC8548	**Low end**: 800 MHz, tbd W typ. **High end**: 1.5 GHz, tbd W typ.	32-bit/33-MHz CompactPCI system slot, 1 CompactPCI slot PICMG 2.0 or PICMG 2.30	2 GB (ECC) DDR2 SDRAM, 128 KB FRAM, 2 MB SRAM, 16 GB SSD Flash	**Standard front I/O**: 2 Gb Ethernet, 2 USB 2.0 **Rear I/O**: up to 3 Gb Ethernet, 4 USB 2.0, up to 2 SATA, up to 64 user-defined I/O lines **Other I/O**: FPGA (Altera Arria or Altera Cyclone) for user-defined I/O functions	Linux, VxWorks, INTEGRITY
F206N	Slave SBC	Nios Soft Core	33 MHz, tbd W typ.	32-bit/33..66-MHz 1 CompactPCI slot	32 MB SDRAM, 2 MB Flash	**Front I/O**: 1 debug interface **Other I/O:** FPGA (Altera Arria or Altera Cyclone) for user-defined I/O functions	Nios sample designs, development package, update tools
F218	Slave CPU Board	PowerPC MPC8314	266 MHz, tbd W typ.	32-bit/33-MHz CompactPCI peripheral slot, 1 CompactPCI slot	256 MB DDR2 DRAM, 16 MB Flash	**Standard front I/O**: 2 Gb Ethernet, 1 COM **Rear I/O**: 80 GPIO lines **Other I/O**: FPGA (Altera Arria or Altera Cyclone) for user-defined I/O functions	Linux, VxWorks