

## 3U CompactPCI Serial Boards



### CPU Boards

|             | Type | CPU  | Performance Scalability  | CompactPCI Serial Slots        | Memory max.                              | Interfaces   | Software       |
|-------------|------|--|--|--------------------------------|--|--|----------------|
| <b>G25A</b> | SBC  | Intel Xeon D-1500, up to 16 cores (64-bit CPU), Intel technology: Hyperthreading, VT, Turbo Boost            | <b>Low end:</b><br>2 cores, 19 W typ.<br><b>High end:</b><br>16 cores, 45 W typ. | System slot or peripheral slot | 32 GB DDR4 DRAM (soldered), microSD card | <b>Front:</b><br>Two 10 Gb Ethernet, one Gb Ethernet, one USB 3.0<br><b>Rear:</b><br>Four PCIe x1, two PCIe x4, two PCIe x8, two USB 3.0, six SATA, four Gb Ethernet   | Windows, Linux |
| <b>G23</b>  | SBC  | Intel Core i7, up to i7-4700EQ, 2.4 GHz (64-bit CPU), Intel technology: Hyperthreading, VT, AMT, Turbo Boost | <b>Low end:</b><br>1.5 GHz, 25 W typ.<br><b>High end:</b><br>2.4 GHz, 47 W typ.  | System slot or peripheral slot | 16 GB DDR3 DRAM (soldered), microSD card | <b>Front:</b><br>Two DisplayPort, two Gb Ethernet, two USB 3.0<br><b>Rear:</b><br>Five PCIe x1, two PEG x8, eight USB 2.0, two USB 3.0, six SATA, one DisplayPort<br>Optional (mezzanine card):<br>up to eight Gb Ethernet | Windows, Linux |
| <b>G22</b>  | SBC  | Intel Core i7, up to i7-3615QE, 2.3 GHz (64-bit CPU), Intel technology: Hyperthreading, VT, AMT, Turbo Boost | <b>Low end:</b><br>1.5 GHz, 17 W typ.<br><b>High end:</b><br>2.3 GHz, 45 W typ.  | System slot or peripheral slot | 8 GB DDR3 DRAM (soldered), microSD card  | <b>Front:</b><br>Two DisplayPort, two Gb Ethernet, two USB 2.0<br><b>Rear:</b><br>Five PCIe x1, two PEG x8, four USB 3.0, Four USB 2.0, six SATA, one DisplayPort<br>Optional (mezzanine card):<br>up to eight Gb Ethernet | Windows, Linux |
| <b>G52A</b> | SBC  | Freescale QorIQ T4240, 12 cores  | 1.5 to 1.8 GHz   | System slot or peripheral slot | 12 GB DDR3 DRAM (soldered), microSD card | <b>Front:</b><br>Two 10 Gb Ethernet, one Gb Ethernet, One USB 2.0, One RS232 configuration port (USB 2.0)<br><b>Rear:</b><br>Three Gb Ethernet, one USB 2.0, two SATA, One PCIe x2, three PCIe x4                          | Linux          |

**Compare Chart**

## 3U CompactPCI Serial Boards



### Peripheral Boards

|              | Type                                | CPU                      | CompactPCI Serial Slots | Memory max.                  | Interfaces  | Software                                 |
|--------------|-------------------------------------|--------------------------|-------------------------|------------------------------|---|--|
| <b>G229</b>  | Serial I/O Extension Board          |                          | Peripheral slot         |                              | <b>Front:</b><br>Three USB 3.0, one RS232, one RS422/485<br><br><b>Onboard:</b><br>One M.2 SSD  | Linux, Windows                           |
| <b>G227</b>  | PCI Express MiniCard Carrier        |                          | Peripheral slot         |                              | <b>Front:</b><br>Four SMA for HF applications (GPS, GSM, WLAN, UMTS, HSPA)<br><br><b>Onboard:</b><br>Three PCI Express MiniCard slots                                       | Depending on PCIe MiniCard               |
| <b>G233</b>  | Diagnostic Board with Front Display | MCU: STM32 ARM Cortex-M7 | Peripheral slot         | 8 MB Flash, 2 MB SRAM        | <b>Front:</b><br>OLED display, two control buttons, eight user LEDs   | Windows, Linux                           |
| <b>G232</b>  | Multi-Display Controller            | GPU: AMD E6465           | Peripheral slot         | 2 GB integrated graphics RAM | <b>Front:</b><br>Three DisplayPort 1.2 interfaces<br>One DisplayPort 1.1a interface   | Windows, Linux                           |
| <b>G214</b>  | Multi-Display Controller            | GPU: AMD E6760           | Peripheral slot         | 1 GB integrated graphics RAM | <b>Front:</b><br>Four DisplayPort 1.2 interfaces<br>(+ 2 DisplayPort 1.1a interfaces optional via side-board connector)   | Windows Vista/7, Linux                   |
| <b>G212</b>  | PCI Express MiniCard Carrier        |                          | Peripheral slot         |                              | <b>Front:</b><br>Four SMA for HF applications (GPS, GSM, WLAN, UMTS, HSDPA)<br><br><b>Onboard:</b><br>Two PCI Express MiniCards or Express Card 34 or Express Card 54 slots | Depending on PCIe MiniCard/ Express Card |
| <b>G211</b>  | Gigabit Ethernet Interface          |                          | Peripheral slot         |                              | <b>Front:</b><br>Four full/half-duplex 1000BASE-T Ethernet on RJ45 or M12 connectors  | Windows, Linux                           |
| <b>G211F</b> | Quad Fiber Optics Interface         |                          | Peripheral slot         |                              | <b>Front:</b><br>Four optical transceiver channels 1000BASE-SX  | Windows, Linux                           |

**Compare Chart**

## 3U CompactPCI Serial Boards



|             | Type                              | CPU                     | CompactPCI Serial Slots | Memory max.                     | Interfaces  | Software                      |
|-------------|-----------------------------------|-------------------------|-------------------------|---------------------------------|---|-------------------------------|
| <b>G215</b> | Universal Interface Board         | Nios Soft Core optional | Peripheral slot         | 4 MB Flash,<br>Up to 64 MB DRAM | <b>Standard configuration:</b><br>Two CAN, two UARTs, one 8-bit GPIO for use with SA-Adapters (customizable via onboard FPGA) | Linux, VxWorks, Windows, QNX  |
| <b>G201</b> | USB 3.0 Interface                 |                         | Peripheral slot         |                                 | <b>Front:</b><br>Four USB 3.0   | Windows, Linux                |
| <b>G204</b> | M-Module Carrier                  |                         | Peripheral slot         |                                 | <b>Front:</b><br>One M-Module slot  | M-Module driver software      |
| <b>G213</b> | XMC/PMC Carrier                   |                         | Peripheral slot         |                                 | <b>Onboard:</b><br>One XMC slot (two links x4), or one PMC slot (32-bit, 64-bit, PCI-X up to 133MHz)                          | Depending on XMC/PMC card     |
| <b>G403</b> | Binary I/O for Railways           |                         | Peripheral slot         |                                 | <b>Front:</b><br>Four spring cage terminal blocks, 16 bidirectional binary I/Os   | Driver software not necessary |
| <b>G504</b> | SSD Shuttle                       |                         | Peripheral Slot         |                                 | <b>Onboard:</b><br>One 2.5" NVMe U.2 SSD or one NVMe M.2 SSD  | Driver software not necessary |
| <b>G503</b> | HDD/SSD Shuttle & RAID Controller |                         | Peripheral slot         |                                 | <b>Onboard:</b><br>Two 2.5" SATA HDD or SSD   | Driver software not necessary |
| <b>G501</b> | HDD/SSD Shuttle                   |                         | Peripheral slot         |                                 | <b>Onboard:</b><br>One 2.5" SATA HDD or SSD   | Driver software not necessary |

### Ethernet Switch Boards

For an overview of Ethernet switch boards, please have a look at the [compare chart for switch, router, gateway and WAP devices](#).

**Compare Chart**