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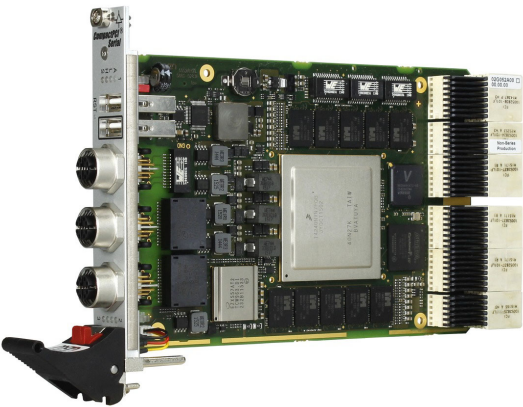
Embedded Single Board Computer with QorIQ T4x series

3U CompactPCI Serial



LEADING THE EMBEDDED FUTURE

- NXP QorIQ, up to 12 cores
- Up to 12 GB DDR3 DRAM soldered, ECC
- Standard front I/O: 2 10 Gb Ethernet, 1 Gb Ethernet, 1 USB 2.0 host, 1 USB configuration port (RS232)
- Standard rear I/O: 14 PCIe lanes, 1 USB 2.0, 2 SATA, 3 Gb Ethernet
- PICMG CPCI-S.0 CompactPCI Serial
- CPU TDP from 32 W to 61 W



Technical Data

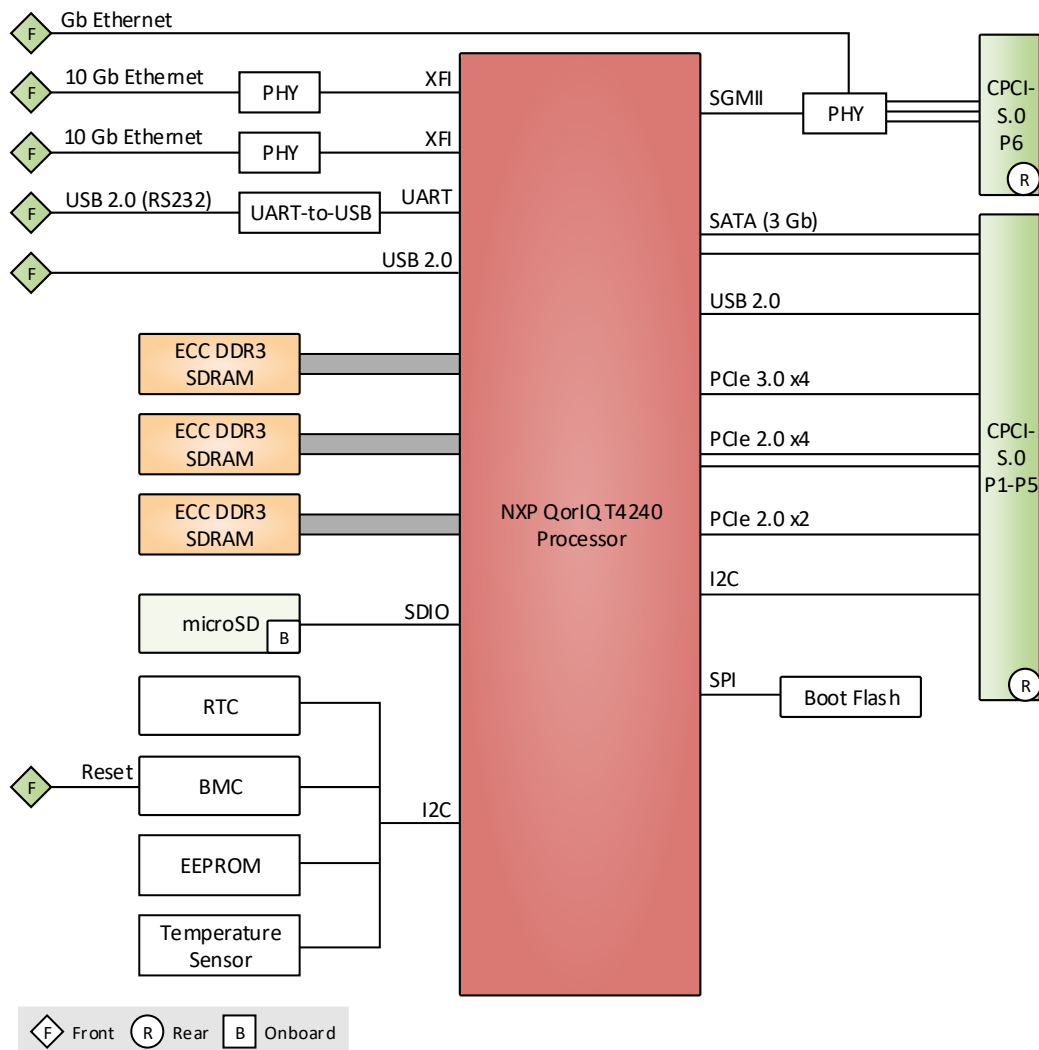
CPU	■ The following CPU types are supported: ■ NXP QorIQ T4240, 12 cores, 1.5 GHz ■ NXP QorIQ T4160, 8 cores, 1.5 GHz ■ NXP QorIQ T4080, 4 cores, 1.5 GHz
Memory	■ System RAM ■ Soldered DDR3, ECC ■ 12 GB max.
Mass Storage	■ The following mass storage devices can be assembled: ■ microSD card (32 GB max.)
Interfaces	■ SATA: 2x SATA Revision 2.x, backplane ■ USB ■ 1x USB 2.0, Type A ■ 1x USB 2.0, backplane ■ 1x USB-to-UART, Type A

Data Sheet



	■ Ethernet ■ 2x 10GBASE-T, M12, X-coded, 8-pin ■ 2x 10GBASE-T, RJ45 ■ 1x 10/100/1000BASE-T, M12, X-coded, 8-pin ■ 1x 10/100/1000BASE-T, RJ45 ■ 3x 10/100/1000BASE-T, backplane ■ PCI Express ■ 2x PCIe 2.0, x4, backplane ■ 1x PCIe 2.0, x2, backplane ■ 1x PCIe 3.0, x4, backplane ■ Reset: 1x, reset button ■ LED ■ Status: board status (BMC) ■ Ethernet: activity, link ■ CPCI hot-plug
Supervision and Control	■ Board management controller ■ Temperature measurement ■ Watchdog timer ■ Real-time clock, buffered by supercapacitor (96 hours)
Product Standard	■ CompactPCI Serial: CompactPCI Serial PICMG CPCI-S.0 Specification
Electrical Specifications	■ Supply voltage: +12 V (9.5 V to 15.5 V) ■ Power consumption: 96 W max., 48 W nom., with T4240 CPU (model 02G052A00)
Mechanical Specifications	■ Dimensions: 3U, 4 HP ■ Weight: approx. 266 g (model 02G052A00) ■ Cooling: Air cooling, forced convection, airflow 2.5 m/s
Product Compliance: Information Technology Equipment	■ Operating temperature: 0 °C (EN 60068-2-1:2007, Ae, temperature value in compliance with 6.6 b) to +60 °C (EN 60068-2-2:2007, Be) ■ Storage temperature: -40 °C (EN 60068-2-1:2007, Ab) to +85 °C (EN 60068-2-2:2007, Bb) ■ Altitude: +3000 m max. (EN 62368-1:2014 + AC:2015) ■ Humidity - Condensation: Non-condensing ■ Electrical Safety: EN 62368-1:2014 + AC:2015 ■ EMC emission: EN 55022 ■ EMC immunity: EN 55024:2010 + A1:2015 (information technology equipment) ■ Flammability (PCBs): UL 94 V-0
Reliability	■ MTBF: 383 000 h @ 40°C according to IEC/TR 62380 (RDF2000) (model 02G052A00)
BIOS/Boot Loader	■ U-Boot Universal Boot Loader
Software Support	■ Linux (on request) ■ See the product User Manual for details on software support: www.duagon.com/products/g52a/#doc

Diagram



Ordering Information

Standard Models

02G052A00

3U CompactPCI Serial enhanced network SBC, NXP QorIQ T4240, 1.5 GHz, 12 GB DDR3 RAM max. on three ranks, M12 Ethernet at front, 0 °C to +40 °C (screened)