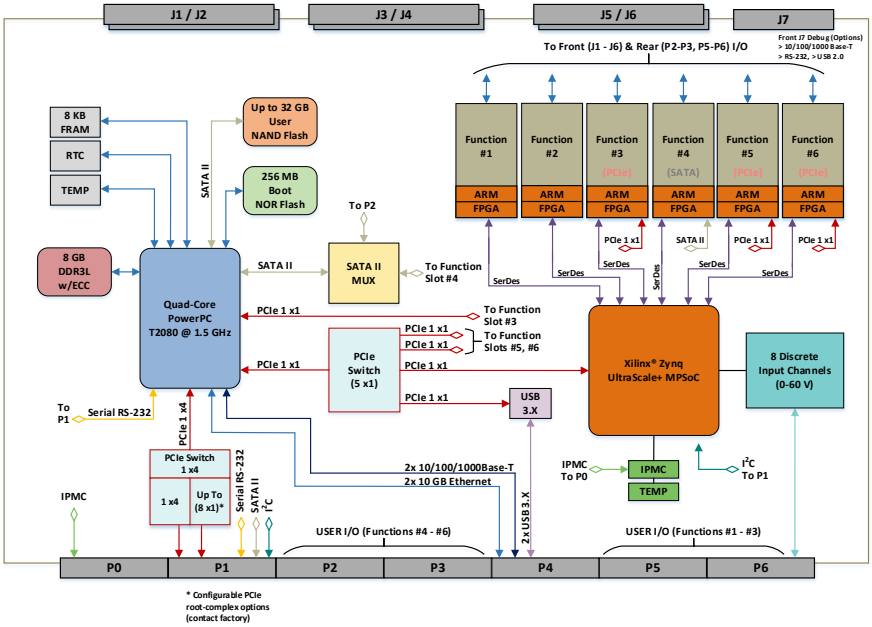
67PPC2 6U OpenVPX SBC with Six I/O Function Module Slots

Over 70 different functions to choose from

Configure to Customize

The 67PPC2 is a 6U OpenVPX NXP® PowerPC based Single Board Computer that can be configured with up to six NAI smart I/O and communication function modules. Ideally suited for rugged Mil-Aero applications, the 67PPC2 delivers off-the-shelf solutions that accelerate deployment of SWaP-optimized systems in air, land and sea applications.



Features

- Slot profile: SLT6-PAY-2F2U2T-10.2.5
  Module profile: MOD6- PAY-2F2U2T-12.2.5-3
  - Data plane: 1 x4 & 4 x1 PCIe
  - Control plane:
    2x 10/100/1000Base-T
    or 2X 1000Base-KX
- NXP QorIQ® T2080 Quad Core e6500 Processor @ 1.5 GHZ
  - 8 GB DDR SDRAM
  - 32 GB SATA II NAND Flash
- 1x USB 2.0, to front maintenance J7
- 2x USB 3.0, to rear I/O
- I²C Bus to rear I/O (option)
- 1x RS232 console (development) port, to front J7 and rear I/O
- Up to 6 independent smart I/O function modules supported
- PCIe interface to function slot #3, 5, 6 (e.g. for additional Gig-E ports option)
- SATA II interface to function slot #4 (e.g. for 256 GB expansion function option)
- Front and/or rear I/O
- 8x Discrete Input (60 V) to rear I/O (option)
- External SATA II interface (option)
- IPMC Support (configured option)
  - VITA 46.11 Tier-2 compatible
- Continuous Background Built-in-Test (BIT) (for function as applicable)
- NAI COSA™ Architecture
- I/O library support included
- Wind River® VxWorks® or Linux BSP/OS Support
- VICTORY Interface Services (Contact factory)
- Developing FACE™ conformance (Contact factory)
- 25 W MB power dissipation (est./typ.)
- Designed to meet systems level:
  - Operating temperature:
    Commercial: 0°C to 70°C
    Rugged: -40°C to 85°C
  - MIL-STD-461 (EMI)
  - MIL-STD-810 (vibration/shock)

North Atlantic Industries

67PPC2

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Select up to 6 functions for your application

I/O		Measurement & Simulation	
A/D	±1.25 VDC to ±100 VDC or 0-25 mA; 16 or 24-Bit; 12 or 16 Ch.	**Synchro/Resolver-Digital**	16-Bit; ±1Arc-Min accuracy; 4 Ch. Measurement)
D/A	±1.25 VDC to ±80 VDC or ±25 mA to 100 mA; 16-Bit, 4-16 Ch.	**LVDT/RVDT-Digital**	16-Bit resolution; 4 Ch. (Measurement)
Discrete	0 to 60 VDC; Sink, source or push/pull; up to 24 Ch.	**Digital-Synchro/Resolver**	16-Bit; Up to 3 VA; 1-3 Ch. (Simulation)
Isolated Discrete	0 to ±80 VAC or VDC; 16 Ch.	**Digital-LVDT/RVDT**	16-Bit; Up to 3 VA; 1-3 Ch. (Simulation)
Relay	SPDT; 4 Ch.	**AC Reference**	2 to 115 V_{RMS}; Up to 6 VA; 1 Ch.
TTL	0 to 5.5 VDC; 24 Ch.	**RTD**	16-Bit; 2, 3 or 4-wire; 8 Ch.
Differential Transceiver	Up to ±12V; 422/485 Pulse Gen/Meas; 16 Ch.	**Thermocouple**	J, K, T, E, R, S, B, N; 4 Ch.
Communications		**Strain Gauge**	16-Bit; 4 Ch.
MIL-STD-1553	Up to Quad Channel, Dual Redundant; Transformer or Direct	**Memory Expansion**	
RS-232/422/423/485	Up to 8 Channel, async or sync/HDLC capable	**SATA II Flash***	Up to 256 GB
ARINC 429/575	12 Ch.		
CANBus	8 Ch; CAN bus 2.0A/B, J1939		
Ethernet Interface**	2x 10/100/1000 Base-T		
Time Triggered * Ethernet (TTE)**	Single Port, Triple Redundant; TTE SAE AS6802, ARINC664 Part 7/AFDX or IEEE 802.3 (best effort)		

*Function slot 4 only
**Function slot 3, 5 or 6
***Function 3 only

For a full listing of available smart functions and detailed specifications please visit https://www.naii.com/functions/

Architected for Versatility

NAI's Configurable Open System Architecture™ (COSA®) offers a choice of over 70 smart I/O, communications, or Ethernet switch functions, providing the highest packaging density and greatest flexibility of any SBC in the industry. Preexisting, fully-tested functions can be combined in an unlimited number of ways quickly and easily.

Board Support Package and Software Support

The 67PPC2 includes BSP and SDK support for Wind River® Linux and VxWorks®. In addition, Software Support Kits (SSKs) are supplied, with source code and board-specific library I/O APIs, to facilitate system integration. Each I/O function has dedicated processing, unburdening the SBC from unnecessary data management overhead.

Background Built-In-Test (BIT)

BIT continuously monitors the status of all I/O during normal operations and is totally transparent to the user. SBC resources are not consumed while executing BIT routines. This simplifies maintenance, assures operational readiness, reduces life-cycle costs and– *keeps your systems mission ready.*

One-Source Efficiencies

Eliminate man-months of integration with a configured, field-proven system from NAI. Specification to deployment is a seamless experience as all design, state-of-the-art manufacturing, assembly and test are performed– by one trusted source. All facilities are located in the U.S. and optimized for high-mix/low volume production runs and extended lifecycle support.

Product Lifecycle Management

From design-in to production, and beyond, NAI's product lifecycle management strategy ensures the long-term availability of COTS products through technology refresh, configuration management and obsolescence component purchase and storage.

Made in the USA
Certified Small Business