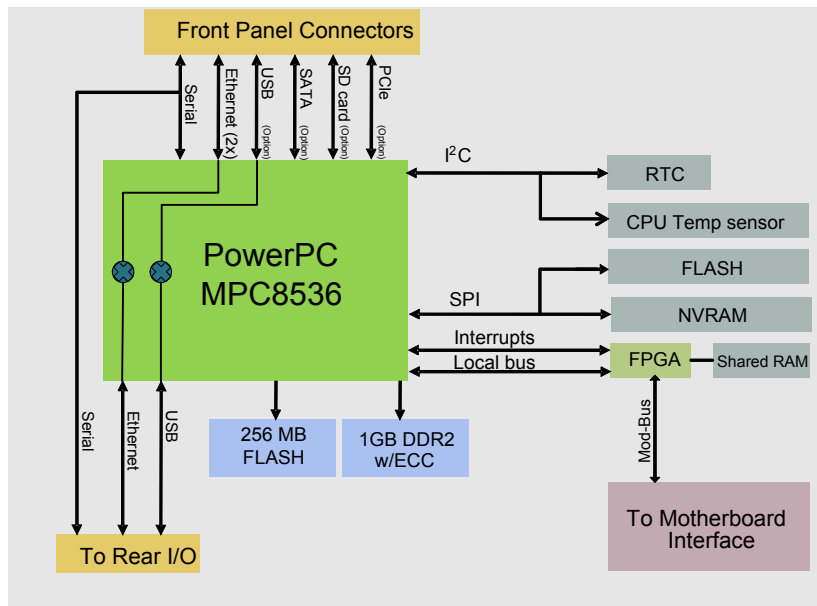


## Processor (Module U3)

## PowerPC Processor and General Purpose I/O Resource for User Operational Programs and Control

Processor:	The MPC8536, high-performance member of the PowerQUICC III™ processor family combines a computation-intensive super-scalar Power Architecture™ processor core with high-performance system peripherals and advanced power management techniques. Integrates SATA, USB, multi-lane PCI Express, Gigabit Ethernet, and DDR memory to increase data bandwidths, reduce valuable board real estate, and lower overall power consumption.
Processor Clock Rate:	1.25 GHz
NAND Flash:	256 MB for data storage
Ferro-Electric RAM:	8 KB for non-volatile data storage
SDRAM:	1 GB for program execution
SPI FLASH :	16 MB for program and data storage
Power:	5V @ 2150 mA (Est. / Typ. Duty cycle)
Weight :	2 oz. (57g)



U3 Processor Module Block Diagram

### U3 Processor Description

Based on FreeScale™ MPC8536 processor, users can confidently take advantage of the familiar VxWorks RTC environment for developing control and application software. Boards fitted with the U3 Processor allow users to develop application code in support of their I/O and communication intensive application without the need for a separate Single Board Computer. The U3 coupled with NAI's extensive I/O function capabilities and BSP/library support offers developers a real time embedded system environment. Additionally, this solution can interface directly to the I/O, other cards on the system bus (Bus-Master capability), perform embedded algorithms and communicate directly to system and sub-system computers. Operating system run time and overhead are reduced due to direct processor control.

### User Requirements/Utility Library

- VxWorks 6.x Development Environment
- NAI U3 VxWorks 6.x BSP
- NAI I/O and Communications Library support