



Features:

- PowerPC™ IBM 750FX, 750GX (1Ghz+) or MPC7410 Processor
- 512KB, 1MB or 2MB L2 Cache (IBM on-chip running at core frequency)
- Up to 32MB of on-board FLASH
- Up to 512MB of Secondary P14 FLASH
- Up to 512MB of on-board 72-bit ECC SDRAM
- Monarch & Non-Monarch applications
- 33/66Mhz PCI Interface
- Single-wide, standard height PMC form factor
- Optional 10/100 Ethernet via front panel or PMC P14 connector
- COP/Debug header
- Front Panel RS-232 Asynchronous serial port
- PPC Boot/RigelBug™ Debug monitor software
- DMA
- Nolam Embedded Systems Two-Year Warranty & support



Hardware Specifications

Processor:

PowerPC:	750FX / GX	MPC7410
Max Core Frequency	800Mhz / 1Ghz+	550Mhz
Inst. Cache:	32KB	32KB
Data Cache:	32KB	32KB
L2 Cache:	512KB / 1MB on-chip	2MB
L2 Cache Frequency:	Processor Core Frequency	200Mhz

Processor Bus:

PowerPC Bus Frequency:	100Mhz
PowerPC Bus Width:	A32/D64
Address Parity:	Yes
Data Parity:	Yes

PCI Bus:

PCI Bus Frequency:	33/66Mhz
PCI Bus Width:	A32/D32
PCI Signal Voltage:	+3.3/+5V Universal
PCI Revision:	PCI Revision 2.1 compliant
PrPMC:	VITA PrPMC compliant

Memory:

DRAM Memory Type:	72-bit ECC PC100 SDRAM
DRAM Memory Size:	64, 128, 256 or 512MB
On-Board FLASH Size:	Up to 32MB
Host Board FLASH Size:	Up to 512MB through P14
I2C EEPROM	8KB User-definable

Peripherals:

Asynchronous Serial Port:

UART Type:	NS16450 compatible
Configuration:	DTE
Access:	Front panel Mini
DB9 & P14 DB9 Signal levels:	RS-232

Optional Ethernet Port:

Controller:	Intel 82559GR
Configuration:	10/100
Access:	Front panel 10/100BaseT or PMC connector P14 for carrier card
PCI Bus:	33Mhz, 32-bit master/target w/burst

Miscellaneous:

Timers:	Four 32-bit programmable
Reset Switch:	Momentary switch generates PCI Reset out when Monarch configuration. Resets local logic when Non-Monarch.
JTAG/COP:	On-board/P14 JTAG/COP debug interface
LEDS:	Front panel indicator LEDES

Power:

Processor:	<u>750FX / GX</u>	<u>MPC7140</u>
PCI Typical +3.3V:	TBD Amps	TBD Amps
PCI Maximum +3.3V:	TBD Amps	TBD Amps

Software:



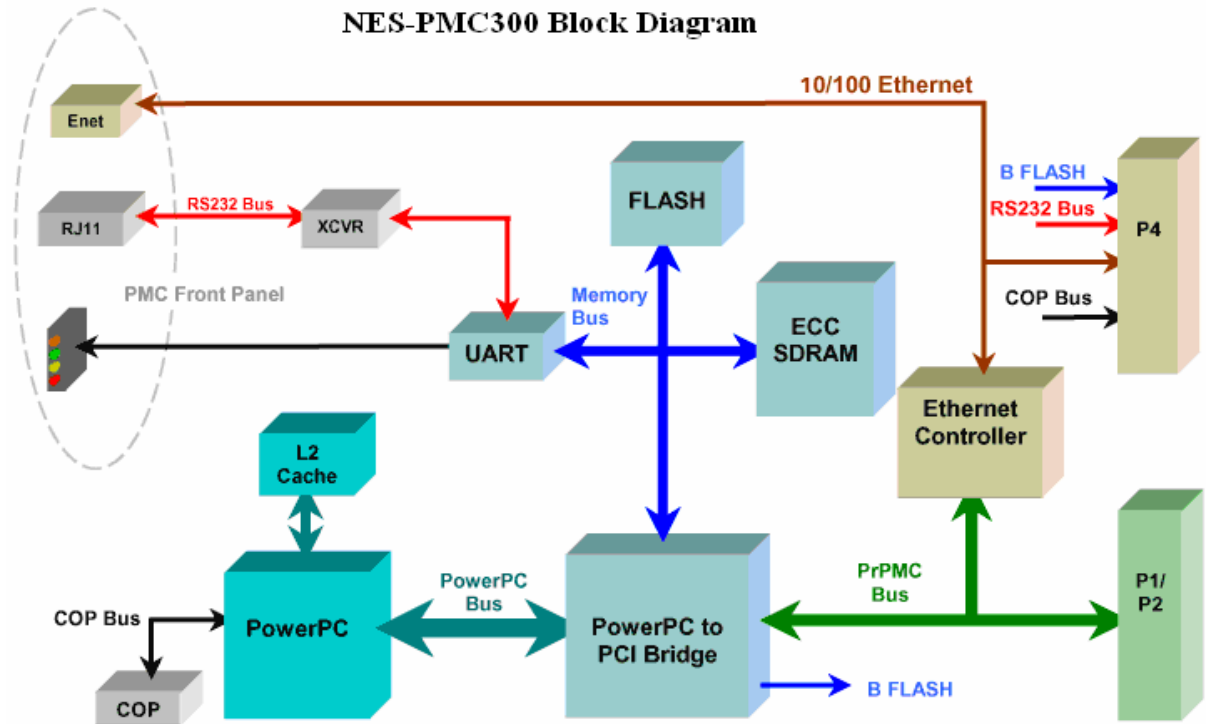
*We will write a
BSP for your
OS!*

**VxWorks 5.4/5.5 Tornado
2.1/2.2**

Linux



NES-PMC300 Block Diagram





Ordering Information

IBM 750FX Power PC

600Mhz 750FX, No Ethernet

64MB SDRAM	NES-PMC300-01
128MB SDRAM	NES-PMC300-02
256MB SDRAM	NES-PMC300-03
512MB SDRAM	NES-PMC300-04
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-05
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-06
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-07
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-08

600Mhz 750FX, Front panel Ethernet

64MB SDRAM	NES-PMC300-09
128MB SDRAM	NES-PMC300-10
256MB SDRAM	NES-PMC300-11
512MB SDRAM	NES-PMC300-12
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-13
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-14
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-15
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-16

600Mhz 750FX, P14 Ethernet

64MB SDRAM	NES-PMC300-17
128MB SDRAM	NES-PMC300-18
256MB SDRAM	NES-PMC300-19
512MB SDRAM	NES-PMC300-20
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-21
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-22
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-23
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-24





800Mhz 750FX, No Ethernet

64MB SDRAM	NES-PMC300-25
128MB SDRAM	NES-PMC300-26
256MB SDRAM	NES-PMC300-27
512MB SDRAM	NES-PMC300-28
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-29
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-30
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-31
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-32

800Mhz 750FX Front panel Ethernet

64MB SDRAM	NES-PMC300-33
128MB SDRAM	NES-PMC300-34
256MB SDRAM	NES-PMC300-35
512MB SDRAM	NES-PMC300-36
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-37
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-38
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-39
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-40

800Mhz 750FX P14 Ethernet

64MB SDRAM	NES-PMC300-41
128MB SDRAM	NES-PMC300-42
256MB SDRAM	NES-PMC300-43
512MB SDRAM	NES-PMC300-44
64MB SDRAM, 32MB on -board FLASH	NES-PMC300-45
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-46
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-47
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-48



Motorola MPC7410 PowerPC

550Mhz MPC7410 No Ethernet

64MB SDRAM	NES-PMC300-49
128MB SDRAM	NES-PMC300-50
256MB SDRAM	NES-PMC300-51
512MB SDRAM	NES-PMC300-52
64MB SDRAM,32MB on –board FLASH	NES-PMC300-53
128MB SDRAM, 32MB on –board FLASH	NES-PMC300-54
256MB SDRAM, 32MB on –board FLASH	NES-PMC300-55
512MB SDRAM, 32MB on –board FLASH	NES-PMC300-56

550Mhz MPC7410 Front Panel Ethernet

64MB SDRAM	NES-PMC300-57
128MB SDRAM	NES-PMC300-58
256MB SDRAM	NES-PMC300-59
512MB SDRAM	NES-PMC300-60
64MB SDRAM,32MB on –board FLASH	NES-PMC300-61
128MB SDRAM, 32MB on –board FLASH	NES-PMC300-62
256MB SDRAM, 32MB on –board FLASH	NES-PMC300-63
512MB SDRAM, 32MB on –board FLASH	NES-PMC300-64

550Mhz MPC7410 P14 Ethernet

64MB SDRAM	NES-PMC300-65
128MB SDRAM	NES-PMC300-66
256MB SDRAM	NES-PMC300-67
512MB SDRAM	NES-PMC300-68
64MB SDRAM,32MB on –board FLASH	NES-PMC300-69
128MB SDRAM, 32MB on –board FLASH	NES-PMC300-70
256MB SDRAM, 32MB on –board FLASH	NES-PMC300-71
512MB SDRAM, 32MB on –board FLASH	NES-PMC300-72





IBM 750GX Power PC

1Ghz 750FX No Ethernet

64MB SDRAM	NES-PMC300-73
128MB SDRAM	NES-PMC300-74
256MB SDRAM	NES-PMC300-75
512MB SDRAM	NES-PMC300-76
64MB SDRAM,32MB on -board FLASH	NES-PMC300-77
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-78
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-79
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-80

1Ghz 750FX Front Panel Ethernet

64MB SDRAM	NES-PMC300-81
128MB SDRAM	NES-PMC300-82
256MB SDRAM	NES-PMC300-83
512MB SDRAM	NES-PMC300-84
64MB SDRAM,32MB on -board FLASH	NES-PMC300-85
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-86
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-87
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-88

1Ghz 750FX P14 Ethernet

64MB SDRAM	NES-PMC300-89
128MB SDRAM	NES-PMC300-90
256MB SDRAM	NES-PMC300-91
512MB SDRAM	NES-PMC300-92
64MB SDRAM,32MB on -board FLASH	NES-PMC300-93
128MB SDRAM, 32MB on -board FLASH	NES-PMC300-94
256MB SDRAM, 32MB on -board FLASH	NES-PMC300-95
512MB SDRAM, 32MB on -board FLASH	NES-PMC300-96

