

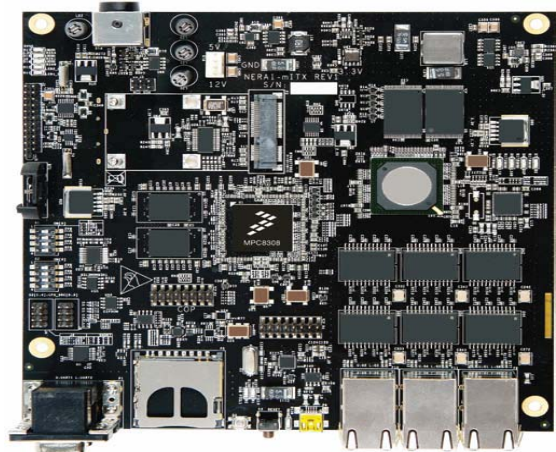


Freescale - MPC8308-RDB - Reference Board MPC8308

Product Overview:

The MPC8308-RDB reference platform is ideal for hardware and software development for embedded applications including consumer printers, wireless access points, industrial control and factory automation equipment.

The MPC8308-RDB integrates : 5 x Gigabit Ethernet ports, 1 x USB 2.0, x1 mini PCI Express connector and an SD/MMC card interface The MPC8308-RDB incorporates a reinstalled board support package (BSP) containing a boot loader (u-boot)—a generic Power Architecture technology system based on the Linux kernel. The u-boot and Linux kernel reside in the on-board flash memory and launch when the board is powered up.



Kit Content:

- MPC8308-RDB board
- Cables
- Power supply
- Bill of materials
- Schematics
- Gerber files
- User guide
- Free six-month evaluation license for
 - CodeWarrior™ tools

Key Features:

- MPC8308 PowerQUICC II Pro processor up to 333/266 MHz (CPU/DDR2)
- Ethernet
 - 4-port Gigabit Ethernet switch, supporting RGMII/MII
 - Single Gigabit Ethernet PHY (RGMII)
- PCI Express interconnect
 - Mini PCI Express for WLAN

- Two I2C
 - Connected to real-time clock
 - May be eliminated using the MCU
- Dual UART
 - Connectors for debug connectivity
- Local bus
 - NAND flash/NOR flash memory
- High-Speed USB 2.0
 - Single USB 2.0 supporting host, device or OTG
- Memory
 - 32-bit DDR2 with population option for 16-bit
- eSDHC
 - Single-port SD/MMC connector
- IEEE 1588v2 support for timing synchronization

Ordering Information:

Products:

Part Number	Manufacturer	Farnell P/N	Newark P/N
MPC8308-RDB	Freescale Semiconductor	1799644	64R6879

Associated Products:

Part Number	Manufacturer	Description	Farnell P/N	Newark P/N
MPC8308CVMAFD	Freescale Semiconductor	Power QUICC II PRO, 333MHz MPU in 473pin MAPBGA package	1799646	64R6881
MPC8308CVMADD	Freescale Semiconductor	Power QUICC II PRO, 266MHz MPU in 473pin MAPBGA package	1799645	64R6880

Similar Products:

Part Number	Manufacturer	Description	Support Device	Farnell P/N	Newark P/N
MPC8349E-MITX-GP	Freescale Semiconductor	MPC8349e-MITX -GP Industrial Reference Platform	POWERQ UICC II PRO	1692095	14M6286

MPC8377E-RDBA	Freescale Semiconductor	MPC837x Family Reference Design Platform	MPC837x family	1706252	40P5264
MPC8349E-MITXE.	Freescale Semiconductor	MPC8349E Reference Platform	POWERQ UICC II PRO	NA	14M6287
MPC8349E-MITX-GP	Freescale Semiconductor	MPC8349e-MITX -GP Industrial Reference Platform	POWERQ UICC II PRO	NA	14M6286

Document List:

Datasheets:

Part Number	Description	Size
MPC8308RDBUG	PowerQUICC™ MPC8308 RDB User's Guide	542 KB
MPC8308EC	MPC8308 PowerQUICC II Pro Processor Hardware Specification	2550 KB
MPC8308RM	MPC8308 PowerQUICC II Pro Processor Reference Manual	8775 KB
MPC8308PB	MPC8308 Product Brief PowerQUICC™ II Pro Processor	542 KB

Application Notes:

File Name	Size
MPC8308RDB Schematics	425 KB
Design Checklist for PowerQUICC II Pro MPC8308 Processor	672 KB
MPC8308-RDB Reference Platform Fact Sheet	318 KB
MPC8308 PowerQUICC® III Processor Fact Sheet	261 KB
PowerQUICC III MPC8555E and MPC8541E Bring-Up Guidelines AN2805	582 KB
Programming the PowerQUICC III/PowerQUICC II Pro DDR SDRAM Controller AN2583	
AN3781 Utilizing Extra FC Credits for PCI Express Inbound Posted Memory Write Transactions in PowerQUICC III™ Devices	447 KB

Hardware & Software:

File Name	Size
CodeWarrior Development Studio for Power Architecture Professional/Linux Application Edition Release Service Pack 1 for P1020 and 8308 (WIN)	5355 KB
CodeWarrior Development Studio for Power Architecture Professional/Linux Application	26050 KB

Edition Release Service Pack 1 for P1020 and 8308	
MPC8308-RDB BSP	1264916 KB

Others Resources:

File Name	Size
SG1007Q22009 Network and Communications Processors, SG1007	1001 KB
SG1001 ARCHIVED - 32-Bit Embedded Processors SG1001Q12006	903 KB
NANDFLASHWP How to Interface the PowerQUICC II Pro and PowerQUICC III Local Bus Controller to NAND Flash	182 KB

