# MPC8572 development platform

## (With Type-A carrier for ATCA/MicroTCA chassis)

The development system consists of MPC8572 processor card (MPC8572PC) and Type-A carrier (PQCBA). It will help developer quickly and simply set up the hardware platform where developer can promptly design and test the application software directly, and then reduce the design cycle and fasten time to market. Type-A carrier (also called as Advanced Mezzanine Card) is a standard card architectures established by PICMG and used in ATCA chassis. AMC card is the minimum module which can be plugged into the AdvancedTCA chassis, and support plug and play and front panel plugging. Whether used in AdvancedTCA, MicroTCA, or proprietary systems, AMC card will be the next generation of telecommunications equipment in the smallest FRU (field replaceable components). Type-A carrier provides Gigabit Ethernet port, Serial RapidIO and PCI-Express. With the development platform, we'll supply Linux BSP for the developer, including U-boot, Linux Kernel and drivers codes of the interfaces on the board. Meanwhile, the developer will get the design file of the carrier and the schematics in PDF of processor card.

The MPC8572 family of processors is designed to offer clock speeds from 1.2 GHz up to 1.5 GHz, combining two powerful processor cores, enhanced peripherals and high-speed interconnect technology to balance processor performance with I/O system throughput. Based on Freescale's 90 nm silicon-on-insulator (SOI) copper interconnect process technology, the MPC8572 is designed to deliver higher performance with lower power dissipation. The MPC8572 processors provide a significant performance increase and represent the next step in continuous innovation from the popular PowerQUICC family. With uncompromising integration, the MPC8572 platform builds on the embedded core performance of Power Architecture technology and adds new features to enhance traffic management and security acceleration.

## Pictures



MT8572-A                    UTCA8572

## MT8572-A features:

• **CPU:** MPC8572 dual e500 core, speed up to 1.333GHz each core; performance: 6897 MIPS at 1500 MHz

• **Memory:**

  — 512Mbytes DDR2 at 533MHz SDRAM

  — Up to 8MBytes NOR flash memory

  — Up to 32MBytes NAND flash memory

• **Interface:**

  — Two 10/100/1000 BaseT Ethernet interface

— X8 SERDES interface for Serial RapidIO and PCI Express

— One RS-232 Serial Port

• **General for MPC8572PC**

— COP interface

— 5V fan connector

— 3.3V and 5V power supplied from a carrier board

— Flexible POR configuration by different dip switch setting

— 10-layer PCB routing

— Dimension: 5.79 inch x 2.79 inch

• **General for Type-A carrier:**

—12 V and 5 V power supplies from a 4-pin connector (optional Standalone mode)

— 6-layer PCB routing

— Dimension: 7.1 x 2.9 inch

## Order information

| Model | Product Description | Remark |
|---|---|---|
| MT8572-A | MPC8572 development platform with Type-A carrier | |
| MPC8572PC | MPC8572 processor card | **Optional** |
| UTCA8572 | MicroTCA chassis with two sets of MT8572-A | **Optional** |
| USB TAP | PowerPC in-circuit emulator supporting PQ I, II, II Pro and III family processors | **Optional** |
| JediView for PowerPC | JediView for PowerPC Integrated Development Environment software | **Optional** |