Crusoe[™] TM5800 System Development Kit TM5800 MicroATX Motherboard





The TM5800 MicroATX motherboard is a high-performance multimedia platform reference design based on the Transmeta Crusoe[™] model TM5800 microprocessor. The MicroATX reference design motherboard comes with schematics, design guides, processor specifications, and everything else needed to jump-start new product design efforts with a fully-functional and fully-documented desktop and mobile PC system design.

The Crusoe[™] TM5800 processor with Code Morphing[™] software on the MicroATX motherboard provides the following system-level benefits:

- High performance for demanding applications, optimized for real-life usage patterns.
- High energy efficiency for long battery life in portable applications.
- Low power dissipation and heat generation, requiring minimal thermal solutions.
- Advanced adaptive power and thermal management capabilities:
 - LongRun[™] power management intelligently adapts processor operating frequency and voltage to application workload and energy requirements,
 - LongRun[™] thermal management intelligently adapts processor operation to system thermal environments.
- Full compatibility with all x86 operating systems and applications, including Microsoft® Windows®, Linux, and Internet plug-ins.

The TM5800 MicroATX motherboard includes all the functions of a versatile PC system, including on-board video/graphics, audio, Ethernet, Type-III MiniPCI, and thermal monitor in a standard MicroATX motherboard form factor. System memory is provided with standard memory slots for DDR SODIMM and SDRAM DIMM modules. Other advanced features include a communication/network riser (CNR) slot, USB ports, and an IrDA interface. The Phoenix BIOS used with the TM5800 MicroATX motherboard facilitates easy system configuration and peripheral setup. A battery-powered mobile adapter, providing full notebook PC functionality for the TM5800 MicroATX motherboard).



Crusoe™ TM5800 MicroATX Motherboard Features

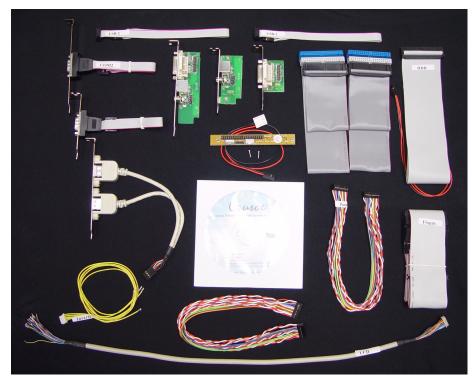
| Processors Supported | Transmeta Crusoe [™] processor models TM5500 and TM5800 (supplied with 800 MHz TM5800) |
|----------------------|--|
| Chipset | Northbridge: Integrated into TM5800 processor Southbridge: ALI 1535+ |
| BIOS | Phoenix BIOS, supports ACPI, DMI, PnP |
| System Memory | 1 x DDR socket for DDR SODIMM modules (supplied with 128 MB DDR-266) 1 x DIMM socket for SDRAM modules |
| I/O Features | 1 x FDD (up to 2.88MB, 3 Mode) 1 x Parallel port (EPP, ECP Port) 2 x Serial ports (2 x RS232) |
| Bus Master IDE | ALI 1535+ built-in two IDE interfaces for up to 4 devices: Supports PIO mode 3/4 or Ultra DMA/33/66/100 IDE HDD, and ATAPI CD-ROM |
| On-board VGA | ATI M6 VGA controller with 8MB VGA memory Supports CRT, Svideo, TV-out, DVI, LVDS |
| On-board Audio | ALI 1535+ built in audio controller AC97 Codec STAC9721T Connectors on board for Line-In, Line-Out, Mic, CD-In, Aux-In |
| On-board Ethernet | NS DP83815 single chip Ethernet controller 10/100 BaseT support, full duplex, Wake-On-LAN RJ-45 connector (rear side) |
| Expansion Slots | Three PCI slots, MiniPCI slot, CNR slot |
| Thermal Sensor | Maxim 1617 |
| USB | Two USB port connectors plus pin header for two additional USB ports |
| IrDA | Pin header |
| Mouse | PS/2 mouse connector |
| Keyboard | PS/2 keyboard connector |
| Form Factor | Standard MicroATX motherboard 9.6" x 9.6" (243.8 mm x 243.8 mm) |

TM5800 MicroATX Motherboard Accessories

The TM5800 MicroATX motherboard comes with a full complement of accessories, including a developers reference design CD-ROM, cable and adapters. Accessories included with TM5800 MicroATX motherboard are listed below, followed by a figure showing these accessories.

- CD-ROM containing:
 - User's Guide
 - Device drivers
 - Reference design files and Crusoe™ processor specification and design guide documents
 - BIOS and microcode upgrade tools
 - LongRun[™] power management monitor and control application
- Video connector bracket adapters for DVI and TV-out (ID130/ID140/ID220)
- LCD panel power and control cables
- CD-ROM drive inverter and power cable adapter
- IDE and floppy drive cables
- USB connector brackets and cables
- COM connector brackets and cables

Accessories Included with TM5800 MicroATX Motherboard





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