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

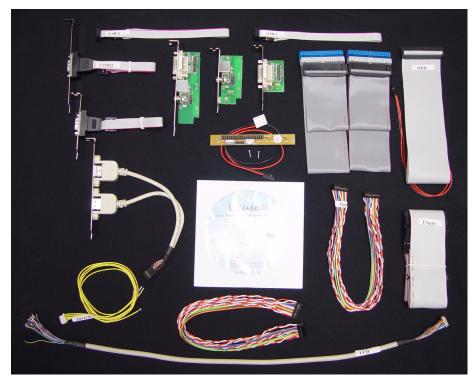
Processors Supported	Transmeta Crusoe [™] processor models TM5500 and TM5800 (supplied with 800 MHz TM5800)
Chipset	Northbridge: Integrated into TM5800 processor Southbridge: ALI 1535+
BIOS	Phoenix BIOS, supports ACPI, DMI, PnP
System Memory	1 x DDR socket for DDR SODIMM modules (supplied with 128 MB 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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