

Simtec ARM7500FE Evaluation board specifications

Processor

Cirrus Logic ARM7500FE, 32-bit RISC processor operating at 56MHz

Memory

Two 72 pin EDO SIMM sockets (256MB maximum) operating at 50ns to 80ns
Three 42 pin DIP sockets for up to 6MB of flash (allowing in-circuit programming), OTP or MASK ROM using 16Mb devices and an optional 80 pin FLASH SIMM socket (32MB system maximum)
241B battery backed CMOS RAM integrated in real time clock module, with hardware protection

Real Time Clock

Real Time Clock module with integrated CMOS RAM and back-up battery (optional external power)
Integrated 64 bit unique serial number

Video

Standard RGB 15 pin VGA output with DDC support, providing modes including:

256 colours at 1600x1200
32K colours at 1024x768
16M colours at 800x600

Support for 256 colour or 16 level mono STN/DSTN half VGA LCD
Genlock connector

Audio

16 bit stereo audio codec with internal 1.1w mono speaker amplifier (mutable), supporting:

Line in
Line out/32Ω headphone out
Microphone
two CD audio inputs
MIDI output
Header for MIDI wavetable
Audio DSP serial interface

Networking

10baseT controller supporting wake-on-LAN
Link and network activity LED integrated into RJ-45
Link activity indicated on HDD activity LED

Integrated Diagnostics

Voltage monitoring
Temperature monitoring and variable fan control and blown fuse detection (thermally re-settable)

Standard I/O Ports

460kb RS232
ECP/EPP IEEE 1284 parallel port
PS2 Keyboard and mouse
Dual channel IDE supporting up to four devices
Floppy disc interface for up to two drives
PC style game port

Expansion

Single 16 bit ISA slot
Second RS232 header (configurable as MIDI)
Second Game port header
IrDA Header (shared with second serial)
One wire bus header
IIC header
Three GPI (alternative volume up/down/mute)

Power Management

Separate microcontroller to “wake up” the system upon the following events:

Alarm
Power button
LAN
Serial
Wake-on header
Keyboard (including password)

Optional watchdog timer

Power Requirements

Standard 20 way ATX power connector

+5v	1A
+5v Standby	150mA to 800mA (depending on mouse/keyboard consumption) up to 500mA
-5v	100mA (serial and clean audio)
+12v	20mA (serial driver only)
-12v	

These ratings do not allow for any expansion card.

Dimensions (Width x Length)

Micro-ATX compliant footprint
7.25 (W) x9.60 (L) inches (184x244mm)

Operating Temperature

32 to 140°F (0 to 60°C)

OS Supported

RISC OS 4.03
Linux