CPU

Intel SA1110, 32-bit RISC processor operating at 190MHz (StrongARM)

System memory

32 MB of SDRAM
8 MB of flash data storage

Real-time clock Provides time of day for Operating System. The clock is capable of waking Puppeteer from sleep mode.

Software

Java Virtual Machine
VxWorks Operating System, with Linux an optional installation
Flash File System

Ethernet

10Base-T Ethernet

Comms

Two RS232 ports are provided, up to 115 kBaud
Digital I/O
The system is capable of handling 24 lines, configurable as input or output.
The output lines are 3.3V TTL-compatible and are not suitable for driving external hardware directly. Expansion units are available to suit a wide variety of external loads (see Expansion section)

Analogue input

2 lines, 10 bit resolution, provided via a Toshiba TC35143 AFE

Audio

12-bit audio codec. This provides 2 separate output lines. This can be used in software as 2 separate mono outputs. The connector is a standard 3.5 mm stereo jack plug (as fitted to portable tape players). A separate amplifier and speakers will be required.
The software is capable of reading WAV files from Microsoft Windows and MP3 files.

Power requirements

+9V to 24V DC input range, 190 mA at 12V
A suitable power supply module is provided with the system.

Dimensions

Length : 260 mm (10.25")
Width : 105 mm (4.2")
Height : 35 mm (1.26")

Connectors

Connectors for digital and analogue I/O. The standard unit provides 8 digital outputs, 11 digital inputs and 2 analogue inputs, using plug-in connectors which are spring-loaded or easy connection.