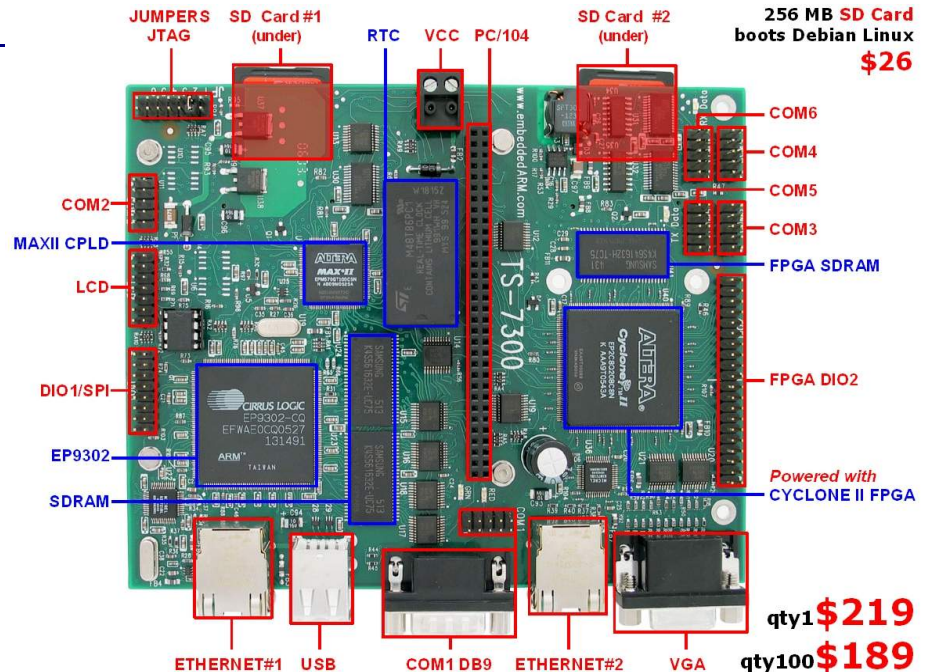


OVERVIEW

The TS-7300 is a compact full-featured Single Board Computer (SBC) based upon the Cirrus EP9302 ARM9 CPU, which provides a standard set of on-board peripherals. The EP9302 features an advanced ARM920T 200 MHz processor design with MMU. In addition, TS-7300 is powered with two SD Card flash sockets and the high performance TS-VIDCORE video interface with Linux framebuffer.

The TS-7300 is a multipurpose board designed for customers needing **extreme design security and reliability** in applications such as gaming machines, building security equipment and network gateways or firewalls.



LINUX FPGA

The inclusion of an Altera Cyclone II FPGA, with over 8000 logic elements, provides many unique possibilities. The default TS-BITSTREAM provides the hardware logic for the 8 serial ports, 2nd 10/100 ethernet port, 2nd SD Card slot, VGA video and up to 35 DIO lines. In addition, the user is able to reprogram the FPGA on-the-fly through the ARM9 CPU running Debian Linux if an additional real-time soft co-processor, DSP, or specific logic is needed.

SD CARD SECURITY

The TS-7300 hardware is able to first **checksum** the boot SD flash Card in its entirety before executing a single instruction of code from it. One may also hardware **lock** and **password** protect the SD Card so that it is only bootable/readable on a specific board. SD Cards can also be made **read-only permanently** and irreversibly once your product is finalized.

SD CARD RELIABILITY

SD Card technology is already extremely reliable compared to hard drives, and with 2 **hot-swappable** SD Cards sockets running Debian Linux, you have the option to use **RAID** on your flash devices to **protect** against individual flash write wearout failures.

FEATURES

- runs **Debian Linux** Operating System for ARM
- 200Mhz **ARM9** CPU with MMU
- User-programmable Altera 2C8 **Cyclone II** FPGA
- 2 **SD Card** flash sockets
- 32 MB **SDRAM** (64 or 128 MB optional)
- **TS-VIDCORE** VGA video (8MBRAM, up to 800x600)
- 2 10/100 **Ethernet** ports
- 2 **USB 2.0** Compatible OHCI ports (12 Mbit/s Max)
- 10 **RS232 serial** ports (more possible if TTL only)
- 55 **DIO** ports (up to 35 TS-XDIO capable)
- **PC/104** expansion bus
- **Fanless** -40° to +70°C, +85°C w/ CPU@166Mhz
- **1.8 watts** power at full-speed
- **Fast boot** to Linux shell in **1.69 secs**
- Optional Battery Backed Real Time Clock (**RTC**)
- Optional Linux Supported **USB 802.11g** **WIFI**
- Visit [TS-7300 webpage](#) for further information

LINUX FOR ARM

TS-7300 makes use of the **Debian Linux** OS for ARM installed by default in a 256MB SD Card (sold seperately). It is a full featured **real-time** capable Linux system that enables **quick time to market** of end-users applications.



We have been in business over 20 years!

We've built our business on **excellent products, low prices and exceptional support**. We sell a wide variety of off-the-shelf PC/104 SBC's and peripherals, and offer custom configurations and designs with excellent pricing and turn around time.

Technologic Systems has never discontinued a product. You can count on long term availability when you include our SBC's and peripherals in your design.