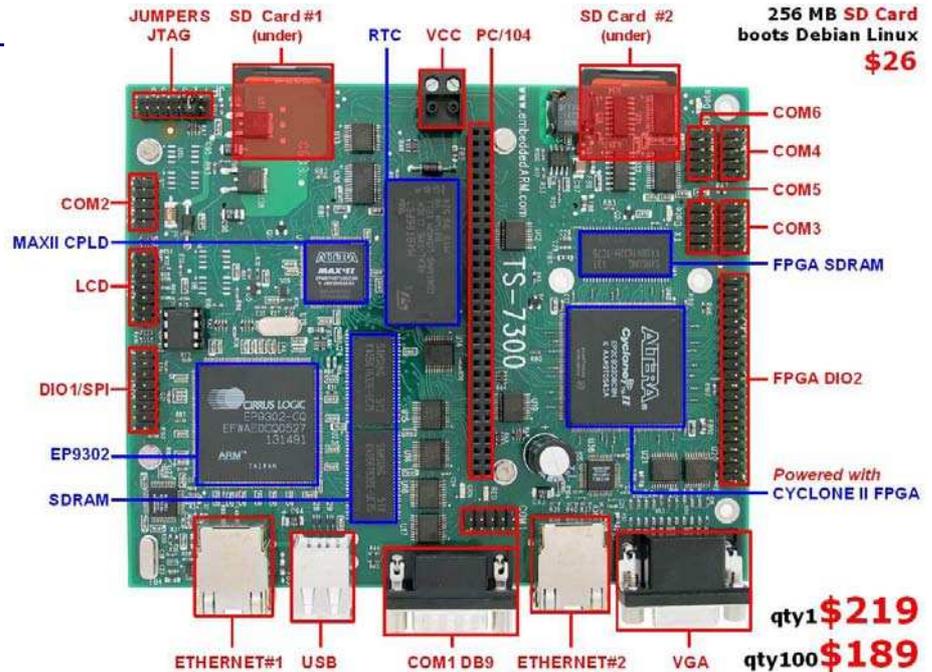


## OVERVIEW

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.