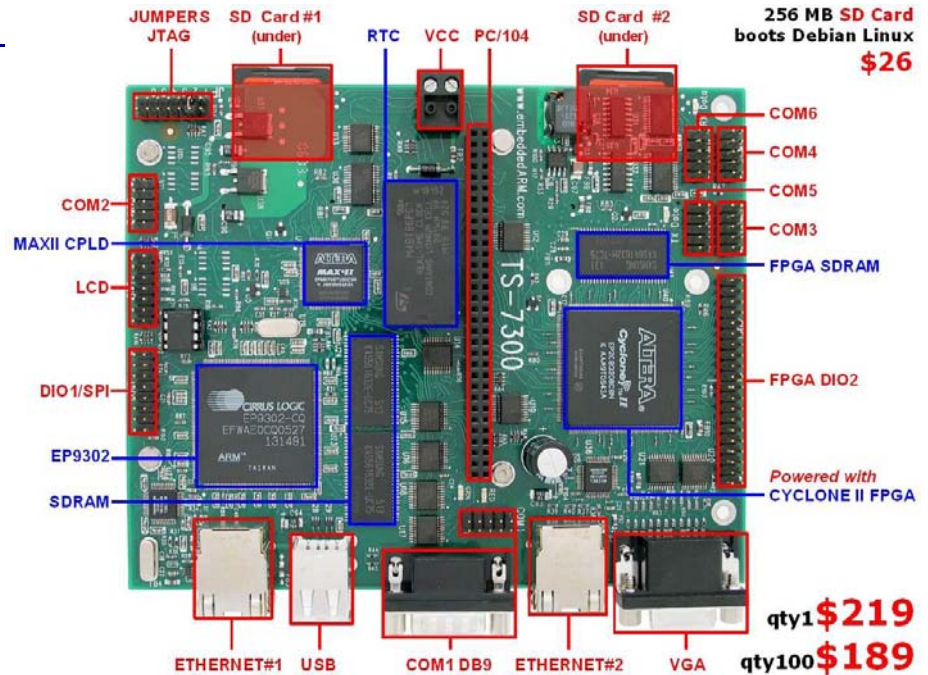


### OVERVIEW

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.