

SD Card #2

(under)

256 MB SD Card

\$26

boots Debian Linux

COM6

COM4

COMS

COM3

FPGA SDRAM

FPGA DIO2

Powered with

CYCLONE II FPGA

qty1\$219

qty100**\$189**

OVERVIEW

The TS-7300 is a compact fullfeatured Single Board Computer (SBC) based upon the Cirrus EP9302 ARM9 CPU, which provides standard set of on-board а peripherals. The EP9302 features MAXIL CPLD 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.



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FEATURES

ETHERNET#1 USB

JUMPERS SD Card #1

(under)

RTC

VCC PC/104

JTAG

COM

LCD

DIO1/SPI

EP9302

SDRAM

7 runs Debian Linux Operating System for ARM

ETHERNET#2

VGA

- 200Mhz ARM9 CPU with MMU 7
- Я User-programmable Altera 2C8 Cyclone II FPGA
- **2 SD Card** flash sockets

COM1 DB9

- **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**
- **7** Optional Battery Backed Real Time Clock (RTC)
- **7** 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.