

## Getting started with the TS-9300

The 9300 boot board is mated via the PC104 connector to an Embedded PC (EPC). The EPC can then boot from the flash drive on the 9300 or from its own inherent flash drive. DIP switches 1&2 control which flash drive the system will use to boot. The 9300 has a 512 KB flash “floppy-drive” mapped as DOS drive (A:) and a 16 MB flash “hard-drive” mapped as DOS drive (C:). The 9300 is compatible with the TS-2100, TS-2200 and TS-2800 EPC products and is capable of saving or restoring the: flash drive, BIOS, DOS, CMOS and RTC using binary images stored in the DiskOnChip. All programming utilities and binary images for supported products are pre-installed. (includes source code for flashup utility, and example code for EPC’s)

### Real Time Clock (RTC)

Battery backed RTC and CMOS memory. Stores time/date for programming target board RTC. When booting from 9300 flash, CMOS setting changes and DOS date and time commands affect this chip. When booting from the EPC, the lower RTC is used.

### POST code LED display

Shows boot progress codes. Mapped to port 0x80, bytes written to port 0x80 will be seen as two digit hex. Shows “00” when BIOS turns over control to DOS.

### User Push-Button

Normally open PB is wired in parallel with DIP 4.

### DIP switch

Switch positions 1&2 control boot mode. Switch positions 3&4 are available for the user. Reading address 0x477 will return the DIP switch settings in the upper nibble. (Off=0, On=1)

DIP position	4	3	2	1
0x477 bit location	7	6	5	4

### Diagnostic LED

Mapped at address 0x472 bit 0. The LED is turned on by hardware by default, then turned off by software during boot-up. Available for user diagnostics after boot-up.



### 8 bit PC104 Connector

Stacks above EPC.

### 512 kb Flash “A: drive”

Bootable flash drive if DIP switches 1&2 are on, otherwise unavailable.

### 16 Mb Flash DiskOnChip “C: drive”

Mapped as DOS drive C: regardless of DIP switch settings. Provides storage for binary images.

DOS drive mappings	9300 flash drive	EPC flash drive	9300 DiskOnChip	EPC DiskOnChip
<b>Boot 9300</b> DIP 1&2 <b>on</b>	DOS drive <b>A:</b> (note 1)	DOS drive <b>B:</b>	DOS drive <b>C:</b>	DOS drive <b>D:</b> (note 2)
<b>Boot EPC</b> DIP 1&2 <b>off</b>	Not available	DOS drive <b>A:</b> (note 1)	DOS drive <b>C:</b>	DOS drive <b>D:</b> (note 2)
Note 1: This is the 'main boot flash' which contains the BIOS and DOS images. Note 2: The EPC DiskOnChip is optional and may not be installed.				