



Z80185/Z80195

SMART PERIPHERAL CONTROLLERS

FEATURES

Part	ROM (KB)	UART Baud Rate	Speed (MHz)
Z80185	32 x 8	512 KB	20, 33
Z80195	0	512 KB	20, 33

- 100-Pin QFP Package
- 5.0-Volt Operating Range
- Low-Power Consumption
- 0°C to +70°C Temperature Range
- Enhanced Z8S180 MPU
- Four Z80 CTC Channels
- One Channel ESCC™ Controller
- Two 8-Bit Parallel I/O Ports
- Bidirectional Centronics Interface (IEEE 1284)
- Low-EMI Option

GENERAL DESCRIPTION

The Z80185 and Z80195 are smart peripheral controller devices designed for general data communications applications, and architected specifically to accommodate all input and output (I/O) requirements for serial and parallel connectivity. Combining a high-performance CPU core with a variety of system and I/O resources, the Z80185/195 are useful in a broad range of applications. The Z80195 is the ROMless version of the device.

The Z80185 and Z80195 feature an enhanced Z8S180 microprocessor linked with one enhanced channel of the Z85230 ESCC™ serial communications controller, and 25 bits of parallel I/O, allowing software code compatibility with existing software code.

Seventeen lines can be configured as bidirectional Centronics (IEEE 1284) controllers. When configured as a 1284 controller, an I/O line can operate in either the host or peripheral role in compatible, nibble, byte or ECP mode. In addition, the Z80185 includes 32 Kbytes of on-chip ROM.

These devices are well-suited for external modems using a parallel interface, protocol translators, and cost-effective WAN adapters. The Z80185/195 is ideal for handling all laser printer I/O, as well as the main processor in cost-effective printer applications.

Notes: All signals with a preceding front slash, “/”, are active Low.

Power connections follow conventional descriptions below:

Connection	Circuit	Device
Power	V _{CC}	V _{DD}
Ground	GND	V _{SS}