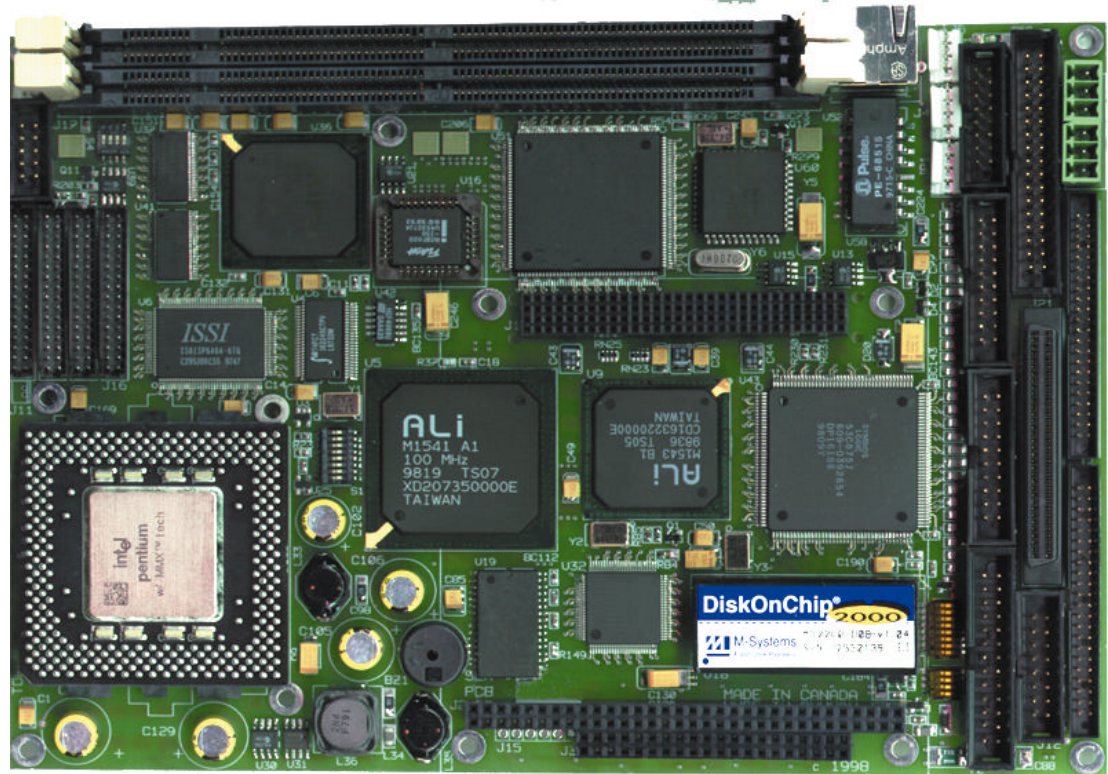# PC/104-*Plus* Pentium Industrial SBC with SCSI, 10/100Base-T, Flat Panel Display, 4 serial ports, Touchscreen interfaces and Flash Disk

5811

FEATURES:

- **Intel Pentium MMX or AMD K6, K6-2, K6-2/3D**

- **Up to 450 MHz CPU with 100 MHz system bus**

- **512KB L2 Pipeline Burst cache memory**

- **Two DIMM sockets supports ECC / SDRAM up to 512 MB**

- **Dual Ultra DMA/33 EIDE**

- **CRT / Flat Panel Display Interface with 2 or 4 MB display memory**

- **LVDS supports Flat Panel Display cable up to 20'**

- **10/100Base-T Network Interface using Intel 82558**

- **Ultra Fast and Wide SCSI-3 supports 40 MB/s using SYMBIOS 53C875**

- **Dish On Chip (DOC) socket supports up to 14 MB Flash Disk**

- **Four serial ports, one Parallel port and Floppy interface**

- **Dynapro Touchscreen interface**

- **Thermally controlled CPU & system fans**

5811 Technical Specifications

CPU

- Supports Intel low power MMX processor with 1.9V Core and 2.5V I/O
- Supports Intel Pentium MMX and AMD K6, K6-2, and K6-2/3D processors @ 166, 200, 233, 266, 300, 350, 400 or 450 MHz

CPU BUS SPEED

- 66, 75, 83 or 100 MHz system bus speed

CHIPSET

- Aladdin V Core
- C&T B69000 / B69030 video
- Intel 82558 10/100Base-T
- SYMBIOS 53C875 SCSI

THERMAL MANAGEMENT

- Overheat protection
- Overheat slow down
- Thermal controlled CPU & system fan connectors

DRAM MEMORY

- Two 168-pin DIMM sockets
- Supports 3.3V EDO and SDRAM memory
- Supports non-parity, parity and ECC memory
- Supports up to 512 MB of SDRAM

CACHE MEMORY

- Standard 512 MB L2 synchronous burst cache

FLASH/SOLID STATE DRIVE

- M-System Disk-On-Chip (DOC) up to 72 MB of Flash with built-in EDC/ECC
- Support DOS, Windows NT, Window CE, Windows 95, QNX, pSOS and VxWork OS

BUS

- 16-bit PC/104 interface for optional, sound, COMPACT FLASH, Battery-Backed SRAM, additional serial ports, and additional network interface
- 32-bit PCI on PC/104-*Plus* bus
- Supports 33 MHz PCI bus clock

I/O

STANDARD I/O PACKAGE

- 7 DMA channels (8237 compatible)
- 15 interrupt channels (8259 compatible)

Real Time Clock

- 50 PPM accuracy, Y2K compliance, built-in removable lithium battery pack support up to 10 years

Floppy

- One 2x17 shrouded header supports 1.44 / 2.88 MB drives

Serial ports

- Four RS-232 ports on two 2x10 shrouded headers, 16C550-compatible with optional RS-485/422 on one port.

Universal Serial Bus

- Two USB ports on two 1x4 friction lock headers

Parallel port

- Parallel printer port on 2x13 SH. ECP/EPP, PS/2, SPP and 1284 compliance

Enhanced IDE

- Dual independent EIDE supports Ultra 33 DMA
- Support up to 4 drives on two 2x22 2mm shrouded header

Keyboard and Mouse

- PS/2 mouse and keyboard ports on 2x8 shrouded header
- Keyboard inhibit port

TME Auxiliary Connector

- On-board 2x8 SH supports keyboard, mouse, keyboard inhibit, reset

OPTIONAL ON-BOARD I/O

VIDEO INTERFACE

- On-board Flat Panel & CRT display interface using C&T 69000 or C&T B69030
- Support for LCD monochrome, S/S and D/D STN, TFT, EL and gas plasma Flat Panel displays to 1280x1024 resolution
- Supports 3.3V or 5V Flat Panel display
- Supports up to 36-bit LCD on both TTL and LVDS interface
- Capable of driving high resolution LCD at distance up to 30'
- 2 MB of SDRAM display memory on C&T B69000
- 4 MB of SDRAM display memory on C&T B69030

NETWORK INTERFACE

- Intel 82558 with 32-bit PCI local bus interface
- Supports 10/100Base-T/TX
- Supports boot PROM for diskless system
- Configuration information stored in SEEPROM for jumperless configuration

OPERATING SYSTEMS

- Windows95, Windows98, WindowsNT 4.0, UNIX, SCO UNIX, LINUX, LYNX, VxWORKS, QNX, BANYAN, NOVELL, OS/2, LANtastic and more

ULTRA SCSI

- Ultra SCSI interface supports up to 40 MB/s data transfer rates using SYMBIOS 53C875
- Supports booting from SCSI hard drive or optical drive
- Supports fixed disk, removable media drives, SCSI printer, rewrite optical drives, CD-ROM drives, tape drive, DAT, MO, scanner, Photo-CD support and others

Touchscreen Interface

- DYNAPRO-compatible touchscreen interface supports 4, 5 or 8 wires touchscreen

EMBEDDED SYSTEM BIOS

- Full AT-compatible BIOS
- BIOS stored in flash EPROM to facilitate remote firmware update capability
- Optional no-fail boot, fast boot and secured-boot
- Optional batteryless operation
- Optional Customer signs on message boot up
- Advanced firmware setup utility for system parameter and I/O configuration
- Power saving mode with "green PC"

EMBEDDED PC SYSTEM

- Watchdog timer with software or hardware disables
- 128 bytes of SEEPROM for CMOS data backup
- 128 bytes of SEEPROM for manufacturing information
- 256 bytes of SEEPROM of user
- Up to 64 KB of extension ROM using on-board programmable flash memory for user firmware
- AT-compatible Real-Time clock with 50 PPM accuracy with built-in battery supports up to 10 years
- 15KV ESD protection on serial ports
- Power Failure detection circuitry
- 5-year product availability support (subject to component availability)
- Warranty of product consistency

DIMENSIONS

- 5.75" X 8" EBX form factor

ENVIRONMENTAL

OPERATION

- Temp: 0°C to 65°C @ no airflow (with CPU fan sink only)
- -40°C to +80°C available upon request
- Humidity: 5% to 90% non-condensing

STORAGE

- Temp: -40°C to 95°C
- Humidity: 5% to 95% non-condensing

POWER REQUIREMENTS

+5V ± 5%

Typical - Pentium (MHz)

166 *	200	233	266 *
1.8A	2.8A	3.2A	2.4A

Typical - AMD K6 (MHz)

266	300	350	400
3.2A	3.6A	4.1A	4.7A

Measured with 32 MB 3.3V EDO DRAM, video, SCSI, network interface and all general purpose I/O and touch controller

* Low power embedded MMX processor

SELECTION GUIDE

To order use 5811C-XX-V-N-S-T-RV

C	C	166 MHz Intel low power MMX
	D	200 MHz MMX
	E	233 MHz MXX
	F	266 MHz Intel low power MMX
	G	266 MHz AMD K6-2
	H	300 MHz AMD K6-2/3D
	I	350 MHz AMD K6-2/3D
	J	400 MHz AMD K6-2/3D
XX	00	No Flash Disk
	XX	Amount of Flash Disk installed
V	0	No video
	1	Flat Panel / CRT interface installed with LVDS transmitter
N	0	No network
	1	Network installed
S	0	No SCSI
	1	SCSI installed
T	0	No touchscreen
	1	DYNAPRO compatible touchscreen interface installed
RX	XX	Contact TME for latest revision information