

PCM-9343

DM&P Vortex86DX-1.0 GHz 3.5" SBC, Ultra Low Power, Onboard Memory, Dual LAN, PC/104

NEW



Features

- DM&P Vortex86DX, onboard DDR2 memory up to 512 MB
- Display type: CRT, 24-bit LVDS, 24-bit TTL
- Supports Floating Point Unit, total power consumption 4 - 6 Watts
- Dual Lan: 10/100 LAN1 and 10/100 LAN2, supports PC/104 (8-bit/16-bit ISA) expansion
- Supports embedded software APIs and utilities, OS: DOS, WinCE, WinXPE and Linux

Software APIs:

- Watchdog
- PC
- Brightness
- GPIO
- Backlight On/Off

Utilities:

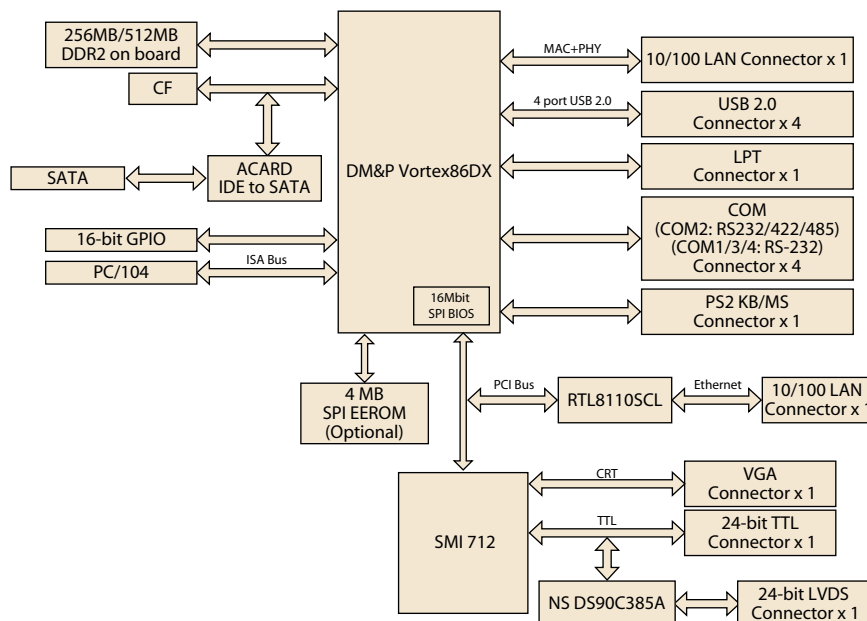
- BIOS flash
- eSOS
- Flash Lock
- Embedded Security ID



Specifications

| | | | |
|--------------------------|-----------------------------|---|---|
| Processor System | CPU | DM&P Vortex86DX 1.0 GHz, supports floating Point Unit (FPU) | |
| | Frequency | 1.0 GHz | |
| | L2 Cache | 256 KB | |
| | System Chipset | DM&P Vortex86DX + SMI SM712 | |
| Memory | BIOS | Award integrated 16 Mbit ROM in SOC | |
| | Technology | DDR2 333 MHz SDRAM on board | |
| | Max. Capacity | 512 MB | |
| Display | Onboard memory | Onboard 256 MB or 512 MB | |
| | Chipset | SMI SM712 2D graphics chip | |
| | VRAM | 4 MB internal memory | |
| | Graphics Engine | | 62.5 MHz single clock/cycle engine (EM+) |
| | | | 86 MHz single clock/cycle engine (EM4+) |
| | | | Designed to accelerate DirectDraw |
| | LVDS | | Supports up to 1024 x 768 @ 24-bit LVDS LCD Panel |
| VGA | | Supports up to 1024 x 768 @ 85 Hz | |
| TTL LCD | | Supports up to 1024 x 768 @ 24-bit TFT LCD Panel | |
| Dual Display | | CRT + TTL, CRT + LVDS | |
| Ethernet | Speed | 10/100 Mbps on LAN1 10/100 Mbps on LAN2 | |
| | Controller | LAN1: 10/100 Mbps on DM&P Vortex86DX LAN2: 10/100 Mbps on Realtek RTL8110SC | |
| | Connector | RJ-45 on LAN1, box header on LAN2 | |
| WatchDog Timer | | Internal: 2 sets, 32.768 kHz frequency source to count a 24-bit counter so the time range is from 30.5µ sec to 512 sec with resolution 30.5µ sec | |
| Storage | CompactFlash | Supports CompactFlash card TYPE I/II (Primary Master IDE Channel) Supports 2 channels Ultra-DMA 100 | |
| | SATA | 1 | |
| | SPI Flash | Optional onboard 4MB SPI Flash Disk (Supported by request) | |
| Rear I/O | Serial | 1 (COM1 supports RS-232) | |
| | Ethernet | 1 (10/100 Mbps LAN1) | |
| | KB/Mouse | 1 | |
| | VGA | 1 | |
| | Reset Button | 1 | |
| Internal I/O | USB | 4 x USB 2.0 | |
| | Serial | 3 COM (COM2, COM3, COM4) COM2 supports RS-232/422/485 COM3/COM4 supports RS-232 | |
| | Parallel(LPT) | 1 | |
| | GPIO | 16-bit GPIO | |
| | I ² C | 1 | |
| Expansion | PC/104 slot | PC/104 Expansion(8/16-Bit ISA) | |
| Power | Power Type | AT | |
| | Power Supply Voltage | Single +5V boot up, (+12V for LCD, ISA) | |
| | Power Consumption (Typical) | | PCM-9343L-S6A1E: 5V : 0.88 A PCM-9343F-S6A1E: 5V : 0.91 A PCM-9343FG-S6A1E: 5 V : 1.08 A |
| | | | PCM-9343L-S6A1E: 5V : 0.746 A PCM-9343F-S6A1E: 5V : 1.09 A PCM-9343FG-S6A1E: 5 V : 1.18 A |
| | | | |
| Battery | | Lithium 3 V / 210 mAh | |
| Environment | Operational | 0 - 60° C (32 - 140° F) | |
| | Non-Operational | Operating: 0 - 60° C (32 - 140° F) (Operating humidity: 40° C @ 85% RH non-condensing) Non-Operating: -40° C - 85° C and 60° C @ 95% RH non-condensing | |
| Physical Characteristics | Dimensions (L x W) | 146 x 102 mm (5.7" x 4") | |
| | Weight | 0.85 kg (1.87 lb), weight of total package | |

Board Diagram



Ordering Information

| Part No. | Onboard Memory | TTL | LVDS | CRT | 10/100 LAN1 | 10/100 LAN2 | Buzzer | LPT | RS-232/422/485 | RS-232 | USB 2.0 | CF | SATA | Expansion | ATX Power | AT Power | Thermal Solution | Operational Temp. |
|-------------------|----------------|--------|--------|-----|-------------|-------------|--------|-----|----------------|--------|---------|----|------|-----------|-----------|----------|------------------|-------------------|
| PCM-9343L-S6A1E | 256 MB | - | - | - | 1 | - | Yes | 1 | 1 | 1 | 2 | 1 | - | PC/104 | - | Yes | Passive | 0 - 60° C |
| PCM-9343F-S6A1E | 256 MB | 24-bit | 24-bit | Yes | 1 | - | Yes | 1 | 1 | 3 | 4 | 1 | 1 | PC/104 | - | Yes | Passive | 0 - 60° C |
| PCM-9343FG-S6A1E | 512 MB | 24-bit | 24-bit | Yes | 1 | 1 | Yes | 1 | 1 | 3 | 4 | 1 | 1 | PC/104 | - | Yes | Passive | 0 - 60° C |
| PCM-9343FGZ-S6A1E | 512 MB | 24-bit | 24-bit | Yes | 1 | 1 | Yes | 1 | 1 | 3 | 4 | 1 | 1 | PC/104 | - | Yes | Passive | -20 - 80° C |

Packing List

| Part No. | Description | Quantity |
|------------|----------------------------------|----------|
| | PCM-9343 SBC | |
| | Startup Manual | |
| | Utility CD | |
| 1700008894 | SATA 7P 30 cm cable | x 1 |
| 1700060202 | PS2 6P x 2 20 cm cable | x 1 |
| 1700100250 | COM3/4 IDE D-SUB 25 cm cable | x 2 |
| 1701140201 | COM2 IDE D-SUB 20 cm cable | x 1 |
| 1700260250 | LPT IDE 26P D-SUB 25 cm cable | x 1 |
| 1703100121 | USB 2 x 5P-2.0 12 cm W/BKT cable | x 1 |
| 1700002142 | LAN IDE 2.0 15 cm cable | x 1 |

Optional Accessories

| Part No. | Description |
|------------|------------------------|
| 1703150102 | SATA 10 cm Power cable |

Embedded OS/API

| Embedded OS/API | Part No. | Description |
|-----------------|-------------|--|
| WinCE 5.0 | 2070009764 | CE 5.0 Pro PCM-9343 V1.3 ENG |
| WinCE 6.0 | 2070009537 | Image CE 6.0 Pro PCM-9343 V1.3 ENG |
| Win XPE | 20070009528 | Image XPE for PCM-9343 |
| Software API | 2056343000 | SUSI 3.0 SW API for PCM-9343 B:20100122 XP |

