

Unit: mm

## Specifications

|                                 |   |
|---------------------------------|---|
| <b>Processor</b>                | DM&P SoC CPU Vortex86EX- 400MHz<br>Real Time Clock with Lithium Battery Backup  |
| <b>Cache</b>                    | L1:16K I-Cache, 16K D-Cache,L2 Cache 256KB  |
| <b>BIOS</b>                     | Coreboot BIOS   |
| <b>System Memory</b>            | 128MB DDR3 Onboard  |
| <b>Flash Disk Support</b>       | Onboard 7.5MB SPI Flash Disk (Drive A, FreeDOS preinstalled)<br>Onboard eMMC 512MB<br>SD card   |
| <b>I/O Interface</b>            | SATA 7-pin connector x 1<br>RS-232 port x3<br>RS-232/485 port x1<br>USB port (Ver2.0) x2<br>16-bit GPIO port x1<br>I <sup>2</sup> C port x1<br>CAN BUS port x1<br>8-CH 11-bit ADC port x 1<br>Mini PCI-E connector x 1  |
| <b>Connectors</b>               | 2.0mm 20-pin box header for 16-bit GPIO x1<br>2.0mm 10-pin box header for USB x1<br>2.0mm 10-pin box header for RS-232 x4<br>2.0mm 10-pin header for ADC x1<br>2.0mm 8-pin header for LAN x1<br>2.54mm 2-pin header for Reset x1<br>2.54mm 5-pin header for Keyboard x1<br>2.54mm 5-pin header for Mouse x1<br>2.54mm 3-pin header for CAN BUS x1<br>1.25mm 4-pin wafer for Line-out/MIC-in x2<br>1.2mm 6-pin wafer for I <sup>2</sup> C x1 |
| <b>Power Requirement</b>        | Single Voltage +5V@400mA  |
| <b>Weight</b>                   | 63g   |
| <b>Dimensions</b>               | 96mm X 90.2mm (3.78 x 3.55 inches)  |
| <b>Operating Temperature</b>    | -20°C ~ +70 °C<br>-40°C ~ +85 °C (Optional)   |
| <b>Operating System Support</b> | DOS, WinCE6.0, WinCE7.0, Linux  |

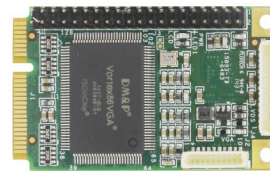
## Packing List

- VEX-6254 x 1
- Cable  
RS-232 (2.0) x 4  
GPIO (2.0) x 1  
USB (2.0) x 2  
Audio Line x 2  
NET 4x2 (2.0) x 1  
PS/2 Mouse Black x 1  
PS/2 Keyboard Black x 1

## Ordering Information

- **VEX-6254-S** Vortex86EX CPU Module 128MB DDR3 & SD card slot
- **VEX-6254-E** Vortex86EX CPU Module 128MB DDR3 & 512MB eMMC
- **MINIPCI-E-9160** Mini PCI-E VGA Module for VEX CPU Module only

## Development Kit



**MINIPCI-E-9160**

- VGA: Maximum resolution up to 1024x768 @ 60Hz
- LVDS/TTL: Maximum resolution up to 1024x768 @ 60Hz
- Single channel 24-bit LVDS