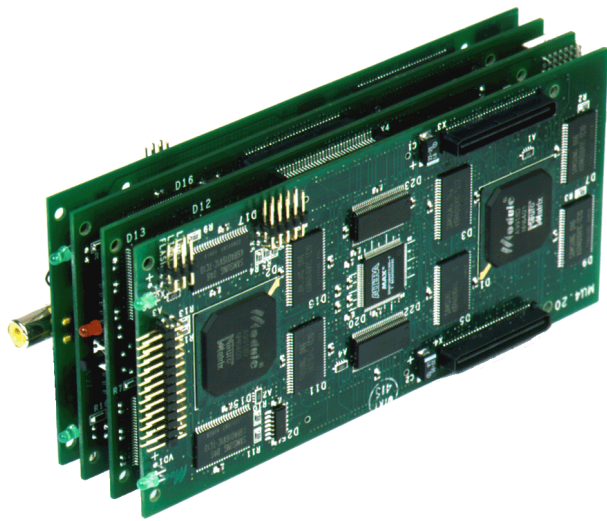


## NeuroMatrix® BM1 PCI/CompactPCI Video Image Processing (VIP) Development Set



BM1 is a reconfigurable high-performance multi-DSP development set designed for real-time video and image processing, signal processing and artificial neural networks.

### Features:

- Modular Design
- One or two NeuroMatrix® VIP Boards
- Up to two I/O Boards equipped with frame grabber, RS-232/485 Interfaces, and watchdog
- PCI or CompactPCI Carrier Board

The BM1 VIP set can be furnished with PCI or 3U CompactPCI Carrier Board and two frame grabbers. This enables using of BM1 as a general purpose development system for acquisition and processing data from two video sources at the same time. Compact design of BM1 allows you to use this set both as a part of desktop system and for embedded applications.

The BM1 VIP set is supplied with strong software development tools including C++ compiler, assembler, debugger, optimized vector/matrix and image processing libraries.

### Specifications:

|                    |   |
|--------------------|---|
| Processor:         | two or four NeuroMatrix® NM6403 RISC/DSP processors   |
| Memory:            | up to 16 MB async. SRAM, 16 MB SDRAM, 1 MB Flash      |
| Interface:         | up to 2 RS232/485 ports and TI 'C40 links             |
| Video:             | up to 2 frame grabbers to acquire NTSC or PAL video   |
| Host Interface:    | PCI or 32-bit 3U CompactPCI (master/slave)            |
| Power supply:      | 3.3V and 5V   |
| Power consumption: | approx. 8 W (3.3V)<br>approx. 2.5 W (5V)              |
| Temperature range: | 0 +70C or -40 +85C                                    |
| Design:            | half-size PCI or 3U CompactPCI (approx. 167x77x50 mm) |

### Support Software:

- NeuroMatrix® NM6403 Software Development Kit
- Vector/matrix Libraries
- Image Processing Library

### Applications:

- Video surveillance
- Intelligent Transport Systems
- Security
- Biometrics control
- Face detection and recognition
- Driver Assistance Systems
- Real-time image and video processing

The modular design, small form factor and low cost allow of using BM1 VIP development system in embedded systems without any hardware redesign.

