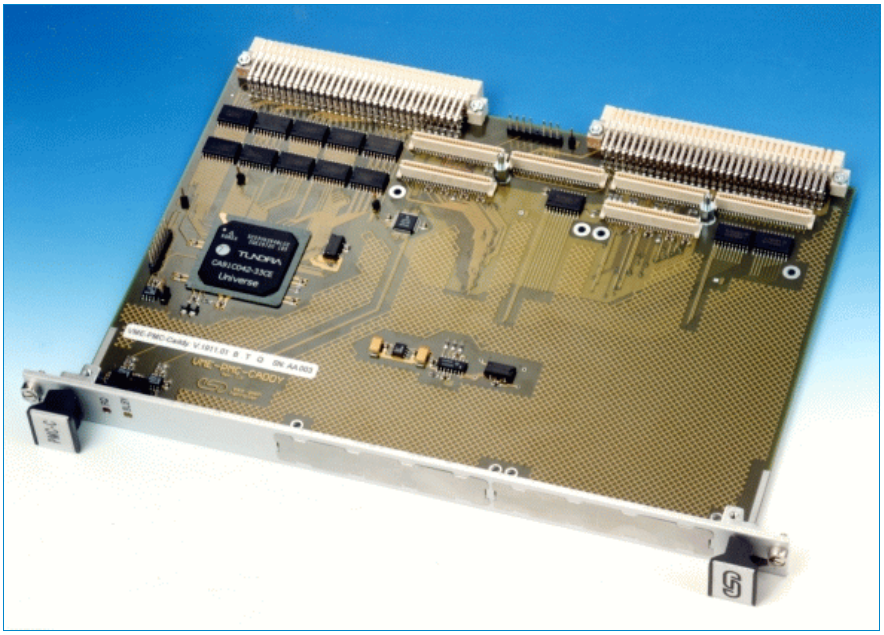
VME-PMC-CADDY
VME-Carrier Board for PMC Modules

Easy Expansion of VMEbus Systems
- *Add up to 2 PMC boards to your system*
- *Connect to the field with P2-IO*
- *Insert 2 single or 1 double size PMC module*
- *Use options for P2 pin assignment and 3.3 V supply*

High Bandwidth Connection between VME and PCI
- *Powerful VME-PCI bridge UNIVERSE CA91C142*
- *4 level VME arbiter and address space up to A32/D32*
- *VME64 extension connector*
- *Master and slave capability*

Reliable design - easy to handle and cost effective
- *Design for low power consumption and easy cooling*
- *Approved in many industrial applications*
- *Standard interfaces and form factors according to IEEE P1386 and IEEE 1014*
- *Software libraries available*



VME-PCI Link
The VMEbus unit PMC-CADDY is a VME64-base board which can carry up to two PMC modules of normal size or one module of double size.
For the VMEbus connection the VME-PCI bridge UNIVERSE CA91C142 by Tundra with an internal clock rate of 33 MHz is used.

VMEbus Interface
The CA91C142 is designed in a way that the board can either operate as slave or as master on the VMEbus. If the board operates as master, it supports a 4-level arbiter. The PMC-CADDY operates with a data width of up to 32 bits and with 32 address signals on the VMEbus. The VMEbus interrupt can be applied to any of the seven interrupt-request lines. The board is connected to the VMEbus by two 160-pin VG-connectors according to IEC603-xx on VME64 extensions.

An active VMEbus-interrupt request is shown by a red LED in the front panel and a VMEbus access onto the board is shown by a yellow LED.

PMC Plug-In Units
Both PMC plug-in units are designed according to the draft standard IEEE P1386/Draft 2.0 (except the standard I/O pin routing). It is possible therefore to insert all PMC modules which are on the market, that can handle 5 V signaling on PCI bus.

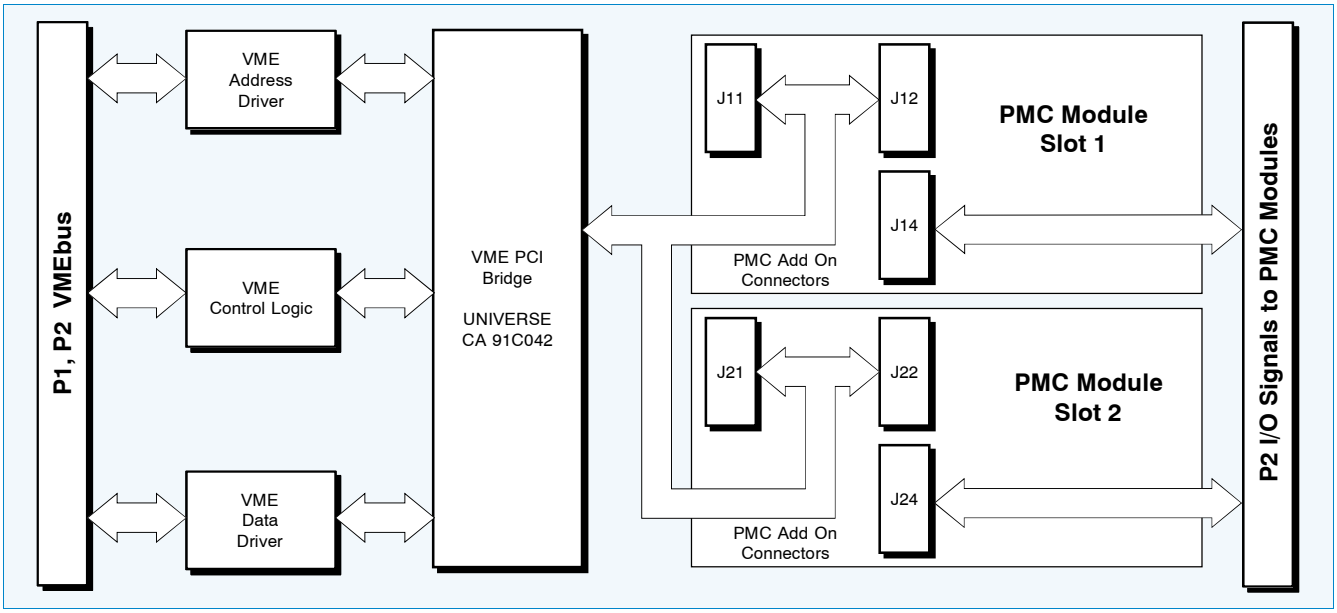
In addition to the connectors for the PMC-address/data and control signals, every plug-in unit of the PMC-CADDY has an I/O-connector which applies the I/O-signals of the PMC modules to VMEbus connector P2. Two different P2 pin assignments are available: In the standard configuration each P2-pin is only connected to one I/O-pin of the PMC-modules (acc. to PMC-Update of FORCE™, Table 1, Author: Wayne Fischer, Director of Strategic Programs CMC/PMC Working Groups Chair, 22.10.96).
In the option '-32P' the pin assignment is acc. to IEEE P1386/Draft 2.0, Table 6-3. This pin assignment offers the connection of the two PMC-modules via P2, because several PMC-I/O-signals are shorted at P2.

Front Panel
The front panel of the PMC-CADDY has two holes for the front panels of the PMC modules. A blank cover for free plug-in units is included in the price.

Software
Example libraries for the initialization of the board in C-Source-Code for VxWorks and OS-9 are available for a fee on a disk (MS-DOS format). Drivers for further operating systems are available on request. Please state your operating system with the version number when you order.

esd electronic system design gmbh
Vahrenwalder Str. 207
30165 Hannover / Germany
Phone: +49 (0) 511 3 72 98-0
Fax: +49 (0) 511 3 72 98-68
E-mail: info@esd.eu

VME-PMC-CADDY
VME-Carrier Board for PMC Modules



Technical Specifications:

VMEbus:	
VMEbus access:	*master or slave function, A32, A24, A16; D8, D16, D32*
Base address:	*selectable via coding switch (no geographical addressing)*
Address modifier:	*standard supervisory and nonprivileged data access, extended supervisory and non-privileged data access, short supervisory and nonprivileged access*
VMEbus standard:	*IEEE 1014 Rev. D*
VMEbus connector:	*160-pole VG connector (IEC 603-xx), acc. to VME64 extension standard*
LEDs:	*VMEbus interrupt - red LED VMEbus access - yellow LED*
PMC slots:	
Standard:	*IEEE P1386 / draft 2.0*
Size:	*two single size or one double size module*
VME PCI Bridge:	*UNIVERSE CA91C142, configuration via coding switches*
Signal voltage level:	*5 V, 3.3V-PMC modules are only usable, if they are 5V-tolerant. PMC-modules with 3.3V-only signal voltage level are forbidden!*

General:	
Temperature:	*0...50 ˚C*
Humidity:	*max. 90 %, non-condensing*
Connector types:	*P1, P2: VMEbus (IEC 603-xx, 160 pins) J11, J12, J21, J22: PMC address/data J14, J24: PMC I/O signals*
Board size:	*160 mm x 233 mm*
VME dimensions:	*6 U height, 4 HP width*

Order information:		
Designation		*Order no.*
VME-PMC-CADDY	*VMEbus base board for two single PMC modules, P2-pin assignment acc. to PMC-Update from 22.10.96 (no interconnection between PMC-modules)*	*V.1911.01*
VME-PMC-CADDY-32P2	*VMEbus base board for two single PMC modules, P2-pin assignment acc. to IEEE P1386/ Draft 2.0, Table 6-3 (interconnection between 16 pins of the PMC-modules)*	*V.1911.11*
VME-PMC-CADDY-3.3P1	*3.3V power supply directly connected to VMEbus 3.3V, not generated from 5V supply*	*V.1911.10*
VME-PMC-CADDY OS-9 LIB	*OS-9 library (68K and Power PC systems)*	*V.1911.56*
VME-PMC-CADDY VxWorks LIB	*VxWorks library*	*V.1911.58*
VME-PMC-CADDY-ME	*English users' manual*	*V.1911.21*
VME-PMC-CADDY-MD	*German users' manual*	*M.1911.20*

esd electronic system design gmbh
Vahrenwalder Str. 207
30165 Hannover / Germany
Phone: +49 (0) 511 3 72 98-0
Fax: +49 (0) 511 3 72 98-68
E-mail: info@esd.eu