

Schede PC104 utilizzate nel «cassetto» CN36  
delle stazioni di misura XR33 di cui si compone la  
Rete di Rilevamento della Radioattività del CNVVF

## DESCRIPTION

The M543 module is based on the high performances CPU ELAN SC520 from AMD (486 at 32 bits) at 133 MHz. The module supports 32 MB or 64 MB DRAM directly soldered on-board. As optional, a memory chip is available for the error correction (ECC) management. It integrates some peripherals commonly used in standard PC applications, as Ethernet Controller 10/100baseT, 4 serials, 1 parallel, floppy and hard disk controller, socket for Solid State Disk, keyboard. The module needs only a +5VDC supply. It can be used as stand-alone or in a PC/104 stack.

## EXTENDED TEMPERATURE RANGE

## TECHNICAL FEATURES

- CPU: AMD ELAN SC520 at 133 MHz
- DRAM: 32 MB or 64 MB soldered on-board; available error correction (ECC) management
- Ethernet Controller 10/100BaseT NE2000 compatible
- Serial Ports: 3 x RS232C and 1 RS232/422/485/IrDa
- Parallel: LPT bidirectional EPP or ECP
- Floppy and IDE hard disk 2.5" and 3.5" interface
- AT keyboard interface
- Speaker output
- PC/104 expansion: 16-bit standard 64 + 40 pins connector
- BIOS and ROM-DOS

BIOS with advanced managing functions; resides in 512 Kbytes Flash. In the same Flash it is possible to install the ROM-DOS 5.0 from MICROSOFT or ROM-DOS 6.22 from Data Light.

- Solid State Disk one 32 pin socket for SRAM, EPROM, FLASH or FLASH modules

On the 2.5" IDE interface it is possible to install IDE Flash Disks (DOM) up to 512 MB

- Watch Dog Timer
- Battery-backed Real Time Clock
- Environmental

Power supply voltage: +5V (4.75V to 5.25V)

Power consumption: 5V, 600 mA

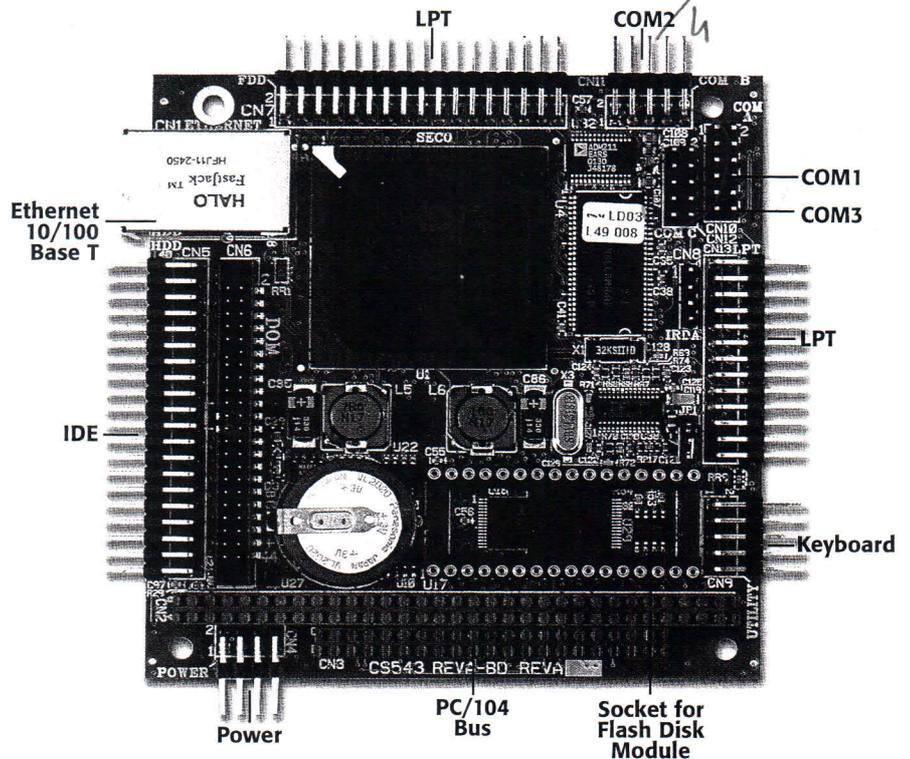
Operating temperature: -40° to 85° C

Storage temperature: -55° to 85° C

Relative humidity: 5% to 95%

- Dimensions 90 x 96 mm (3.6 x 3.8") vertical 19 mm (0.75") for each additional PC/104

## HIGHLY INTEGRATED ELAN SC520 CPU WITH ETHERNET CONTROLLER



## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
M543-CBBBA	AMD ELAN SC520-133 MHz, 32 MB DRAM, Ethernet 10/100
M543-CCBBA	AMD ELAN SC520-133 MHz, 64 MB DRAM, Ethernet 10/100
M543-CEBBA*	AMD ELAN SC520-133 MHz, 64 MB DRAM + ECC, Ethernet 10/100

\* Available on request, min 100 pcs

## ACCESSORIES

PART NUMBER	DESCRIPTION
MFFSxxM	Flash Disk modules 32-pin DIP; capacities: 16, 32, 64, 128, 256 MB
MFD-xxxH-HY	IDE Flash Disk; capacities: 32, 64, 128, 256, 384, 512 MB
CABKIT543	Connection Cables Kit

## PC/104 4 SERIALS RS-232 PORTS MODULE



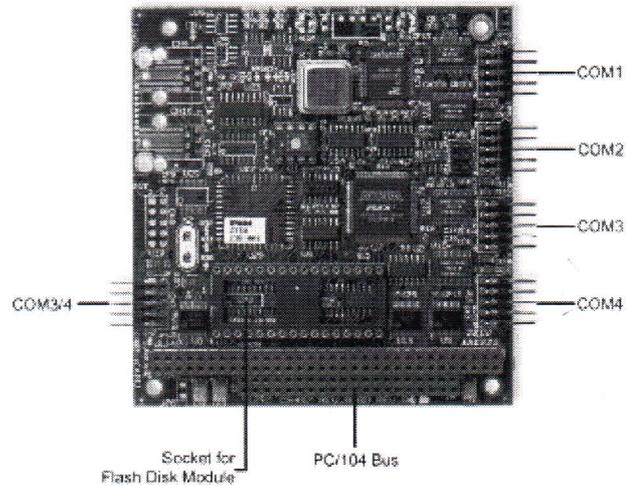
### DESCRIPTION

The M442 module is a low-cost integrated module which offers the chance of expanding the communication possibilities of a PC/104 based system.

The M442 module integrates 4 serial ports: two of them are RS-232C standard serial ports in a Full Modem configuration. The other two ports can be settled to work also in RS-232C Full Modem mode, or in a RS-422 or RS-485 mode.

Addresses of the serial ports are default settled as standard COMs, but are user re-mappable in the I/O space.

IRQ lines of serial ports are individually configurable.



### TECHNICAL SPECIFICATIONS

- **Addresses and Interrupts** configurable via software
- **4 Serial Ports individually configurable:**
  - 2 RS232-C Full Modem ports
  - 2 RS-232/RS-422/RS-485 ports
- **16C554 Quad-UART**
- **16 byte transmit FIFO**
- **16 byte receive FIFO with error flags**
- **Up to 1.5Mbps transmit/receive Operations**
- **PC/104 expansion:**
  - 16-bit standard 64 + 40 pins connector
- **Environmental**
  - Power supply voltage: +5V
  - Power consumption: +5V, 250 mA
  - Operating temperature: 0° to 70° C
  - Storage temperature: -20° to 85° C
  - Relative humidity: 5% to 95%
- **Dimensions** 90 × 96 mm (3.6 × 3.8 )  
vertical 19 mm (0.75 ) for each additional PC/104

### ORDERING INFORMATION

Part Number	Description
M442-A	Four RS-232 Ports Expansion Module



Scheda PC104  
(modulo M543)  
disassemblata

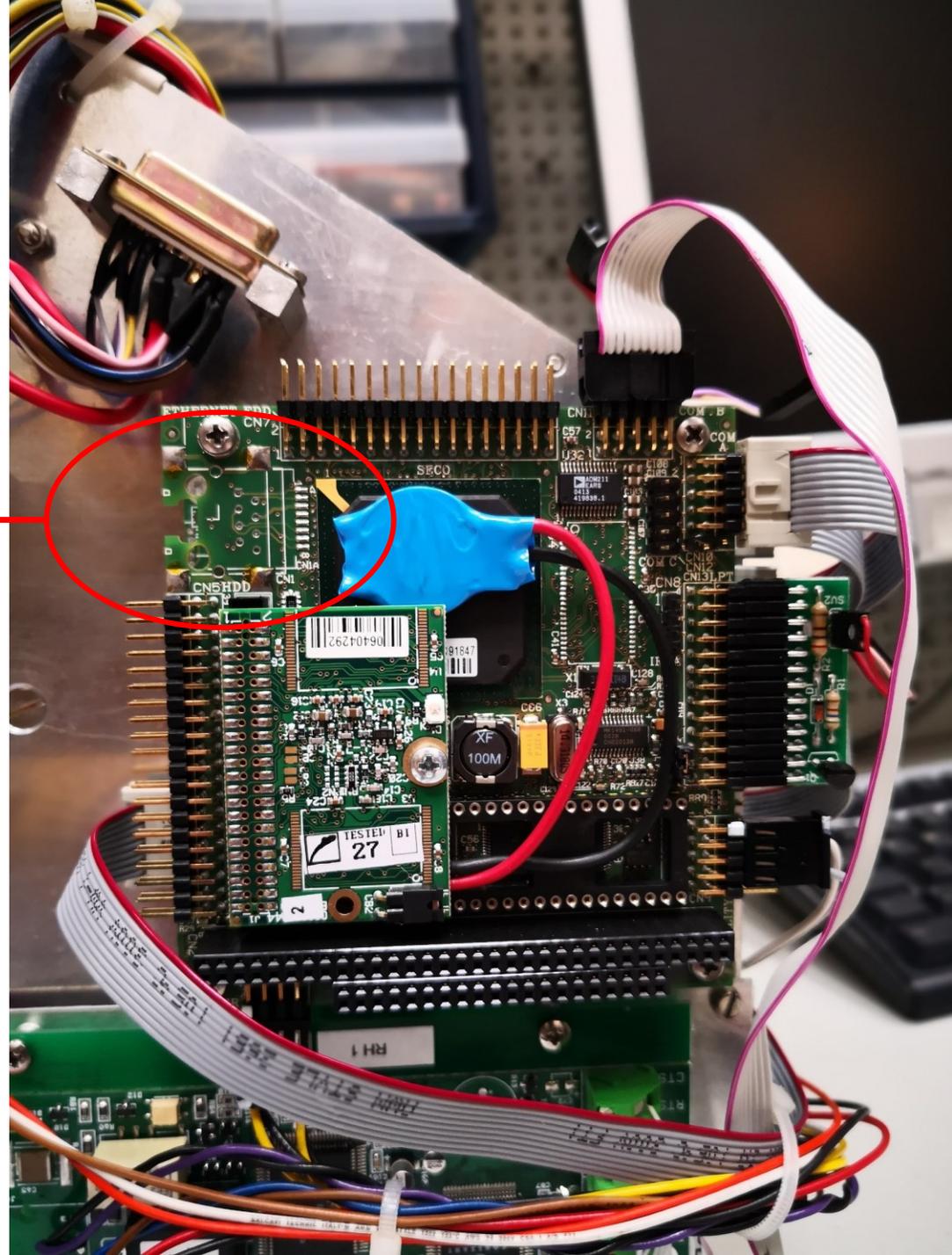


Scheda PC104  
(modulo M442)  
disassemblata

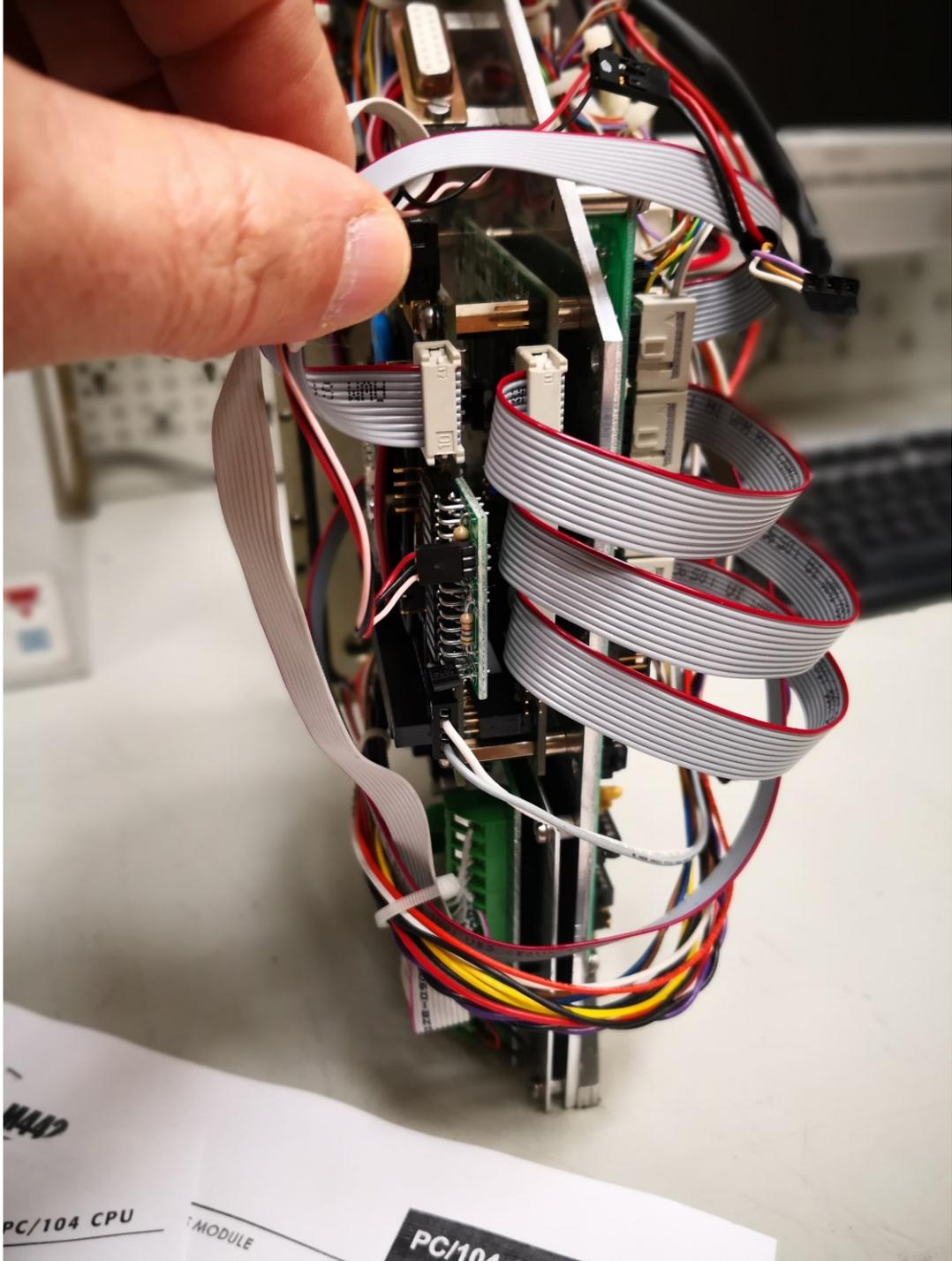


Accoppiamento  
delle schede  
PC104 (modulo  
M543 e M442)  
non collegate al  
«cassetto» CN36





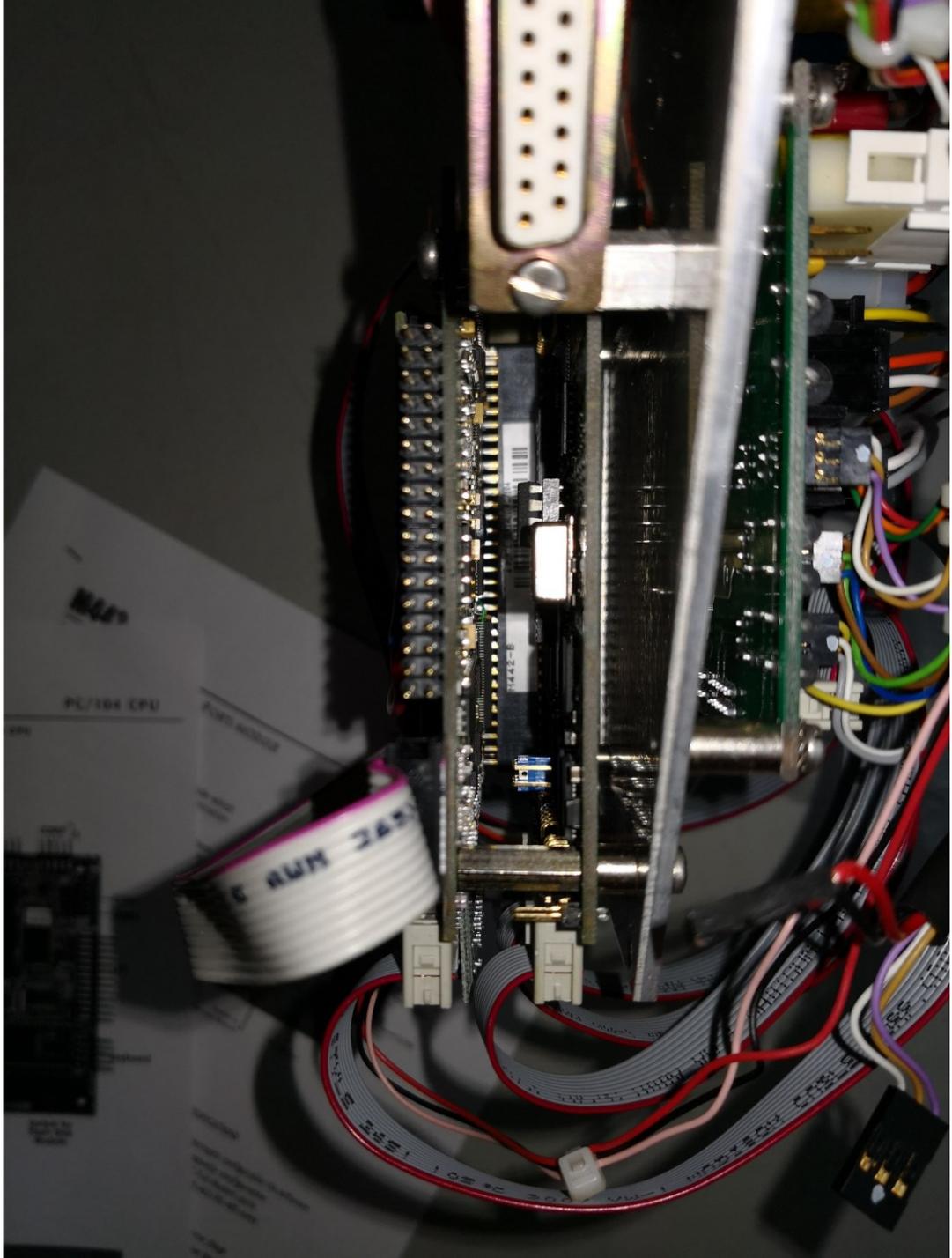
Le schede PC104 montate nei «cassetti» CN36 delle stazioni XR33, come si evince dalle foto, non hanno installata la porta ethernet.

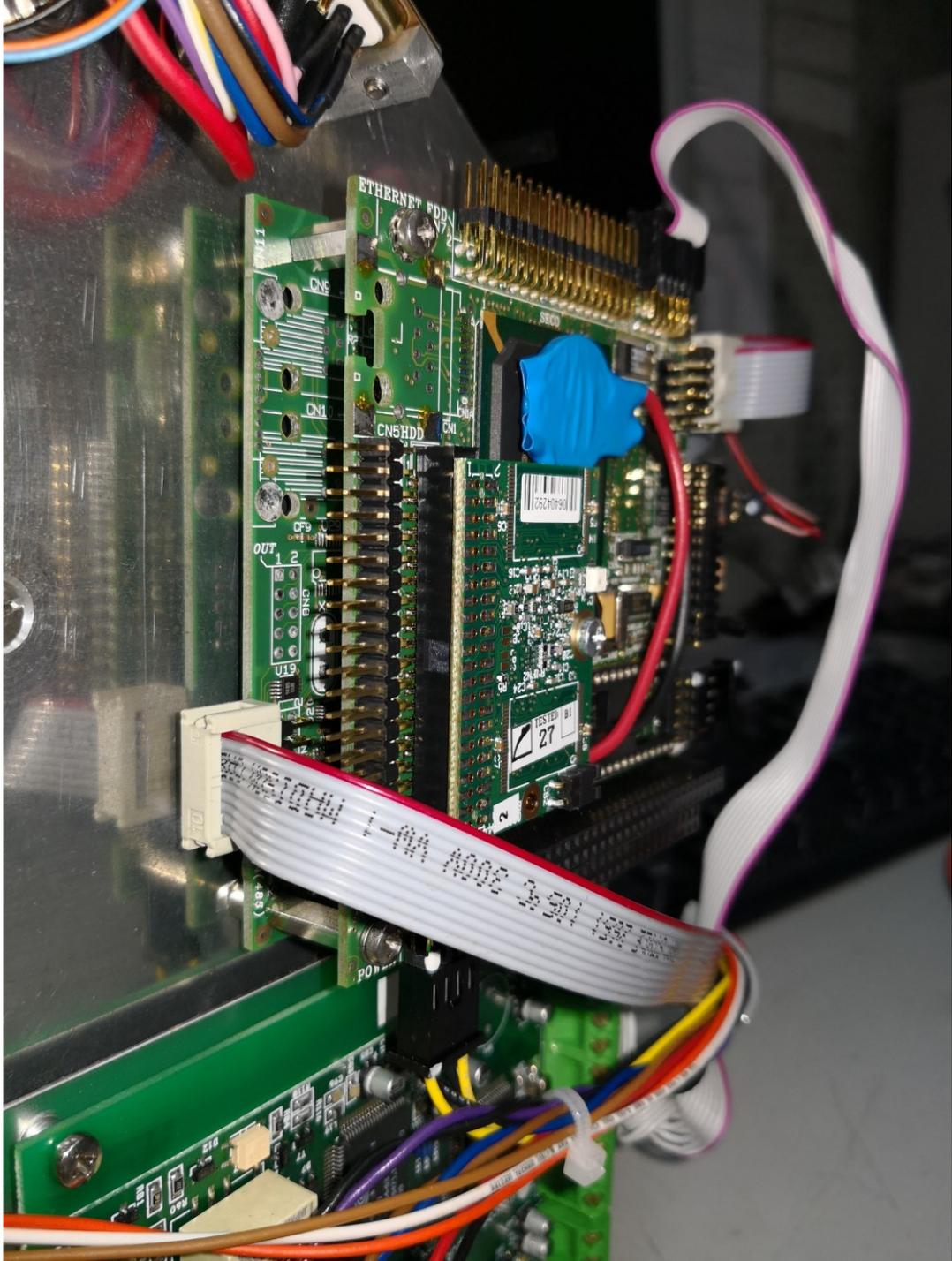


M442  
PC/104 CPU  
MODULE  
PC/104

Schede PC104  
(modulo M543 e  
modulo M442)  
installate nel  
«cassetto» CN36  
(aperto, senza  
parte frontale)  
Vista 1

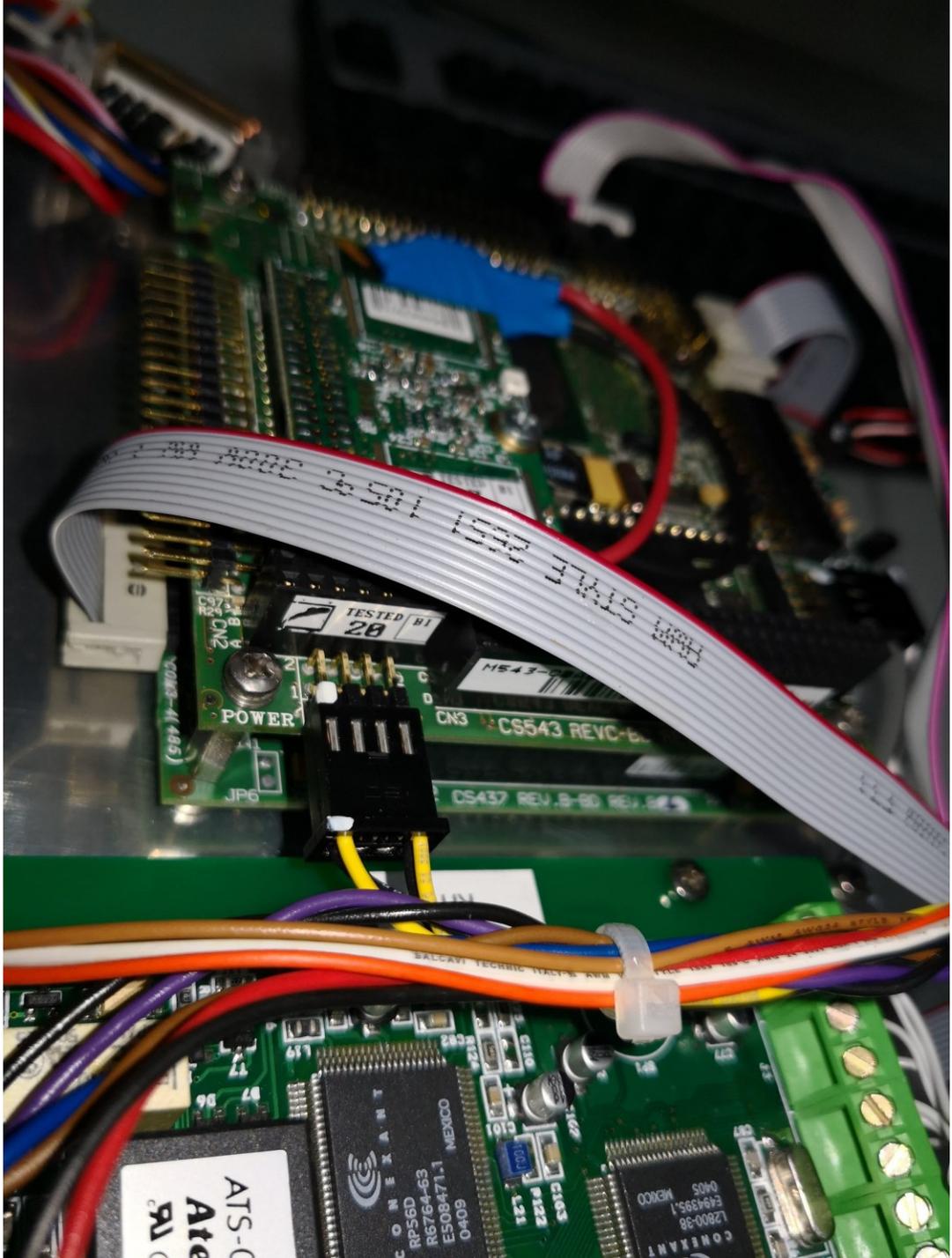
Schede PC104  
(modulo M543 e  
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Vista 2



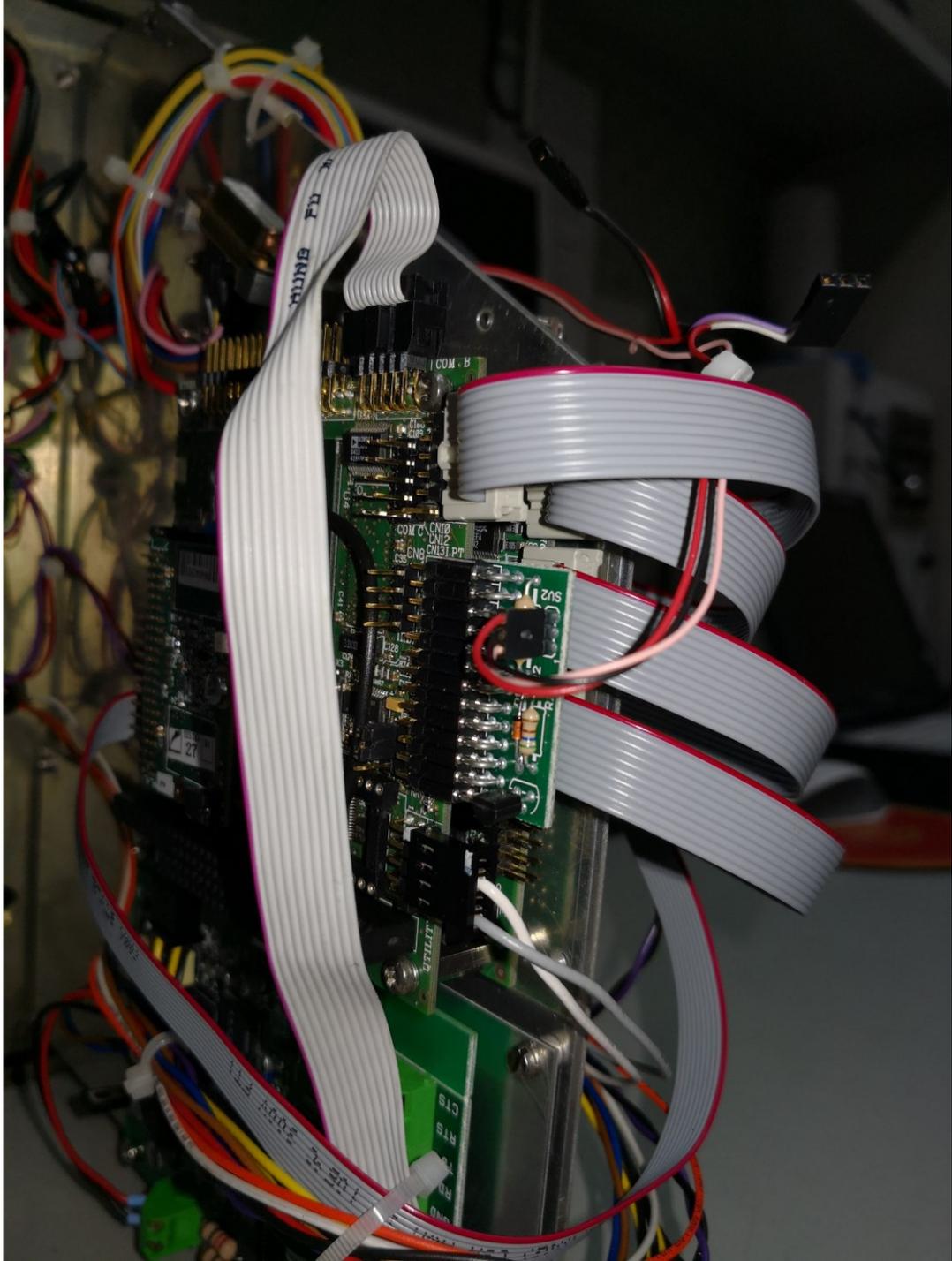


Schede PC104  
(modulo M543 e  
modulo M442)  
installate nel  
«cassetto» CN36  
(aperto, senza  
parte frontale)  
Vista 3

Schede PC104  
(modulo M543 e  
modulo M442)  
installate nel  
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(aperto, senza  
parte frontale)  
Vista 4



Schede PC104  
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(aperto, senza  
parte frontale)  
Vista 5



Schede PC104  
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modulo M442)  
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parte frontale)  
Vista 6

