The following document describes how to upgrade a Vista 8 desk from the 1st generation system PC (EpoX Board) to the new Asus Board. The upgrade should only be performed by qualified personnel, considering standard ESD and installation prerequisites. Please read these instructions carefully before starting the upgrade.

The upgrade requires a soldering station incl desoldering braid, Allen Hex Drivers/wrenches 2/2.5/3, screwdrivers, cutting pliers.

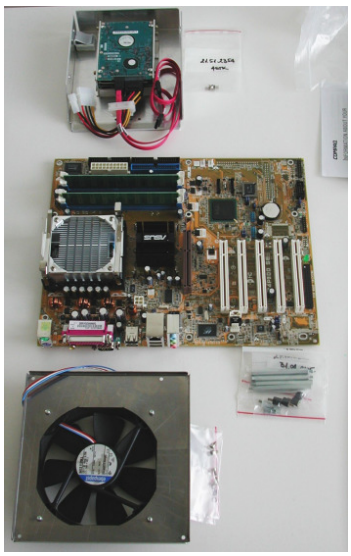
The upgrade kit includes :

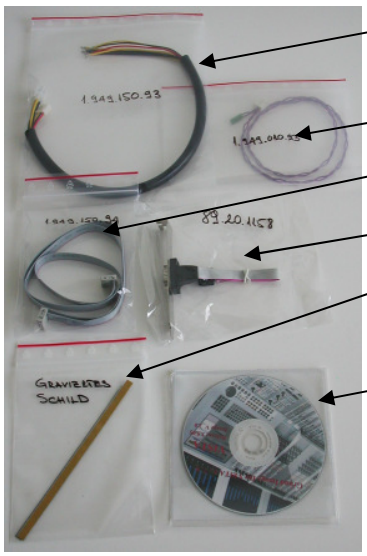
Pos		
1	2 x	ASUS Motherboard, tested and configured inclusive 2 x 256 MB RAM Module, Processor and CPU Adapter CT 479 and connector panel
2	2 x	Motherboard mounting set (3 spacer bolts, 4 fan mounting bolts)
3	2 x	Fan assembly for Asus Motherboard (fan support frame with 120x120mm fan)
4	2 x	Fan mounting set (4 x hex socket srews M3x5 with M3 Fin Washer)
5	1 x	Hard Disk Set for Main PC (tested, 2 serial ATA disks mounted on frame, SW installed)
6	1 x	Hard Disk Set for Redundant PC (tested, 1 serial ATA disk mounted on frame, SW installed)

Cables and accessories :

7	2 x	COM2 Connector Panel		89.20.1158	
8	2 x	Supply cable (to be soldered)	from	1.949.150.93	Distribution board - ASUS
9	1 x	Power-On Cable	from	1.949.010.93	Distribution board - ASUS
10	1 x	USB Cable long (flat ribbon USB)		1.949.151.94	Distribution board - ASUS (red)
11	1 x	USB Cable short (flat ribbon USB)		1.949.150.94	Distribution board - ASUS (main)
12	1 x	RS232 cable	from	1.949.650.00	COM2 Port to Switcher

13	2 x	PC Connector label set
14	2 x	spare SATA cable
15	1 x	mounting kit (4x 35.03.0121, 20 cable clips)
16	1 x	CD set with disk images
17	1 x	Motherboard accessories (CD, Manual ..)





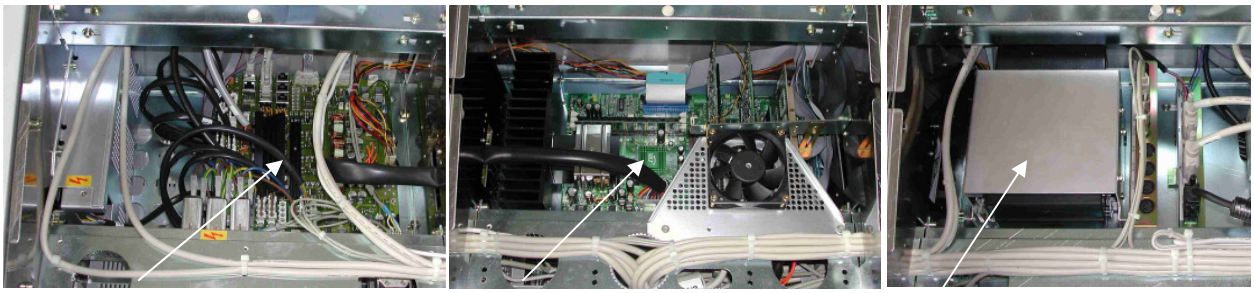
1. System Backup

- Copy your production and system data to an external medium (Memory stick, USB Harddisk, CD), both on main and redundant PC

  D950systemdb: complete folder
  D950projects: complete folder
  D950system: complete folder
  WinNT: d950system.ini

- switch off desk and remove all mains connectors
- remove bays above PC motherboard and distribution board

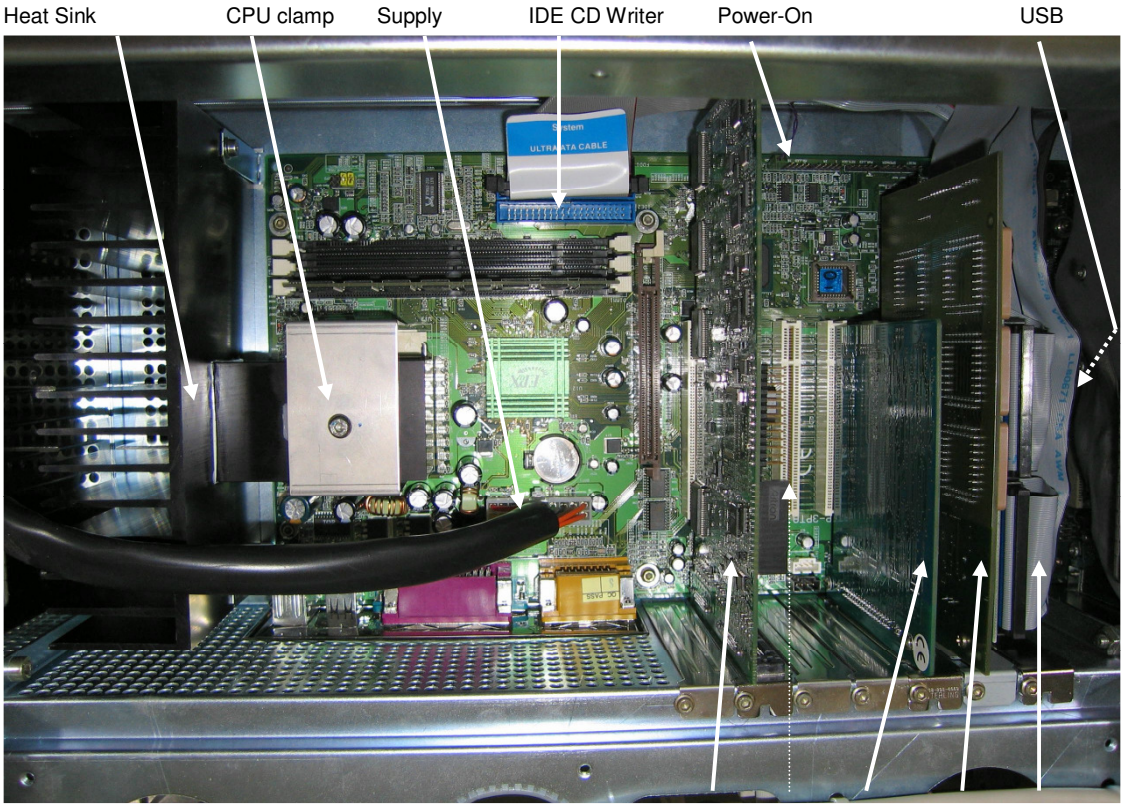
Example of Vista 8 desk (Main Control System)



Distribution Board | Motherboard | Harddisk Frame

- memorize the cable positions and unplug all cables to motherboard and PCI cards (COM ports, keyboard/mouse, Video and Serial ports)

2. Remove Old Motherboard



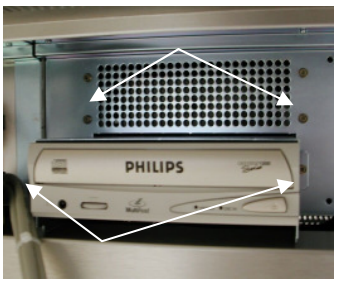
PCI Cards : Graphics 1 (2) Serial Memnet RAID

- remove PCI card holder and disconnect IDE harddisk cables on the RAID card
- remove all PCI cards (and store them in a ESD save place)
- disconnect all cables to the mainboard (supply, USB flat ribbon cable, IDE cable to CD Writer)
  -> IDE cables from RAID card to hard disks and USB flat ribbon cables are no longer used or replaced with new one.

- remove the clamp which mounts the heat sink to the CPU (take care to loosen counternut if present, before turning out the screw. Disassemble the heat sink from the chassis of the desk (no longer used)

- unscrew the motherboard from the chassis and lift it out of the desk.

3. Replace Harddisk

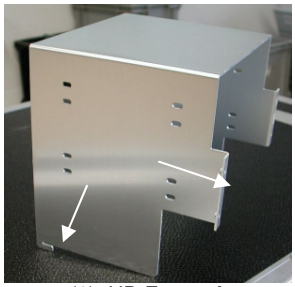


The 2 redundant hard disks are installed in separate SilentDrive enclosures and mounted in a common frame below one of the fader bays.

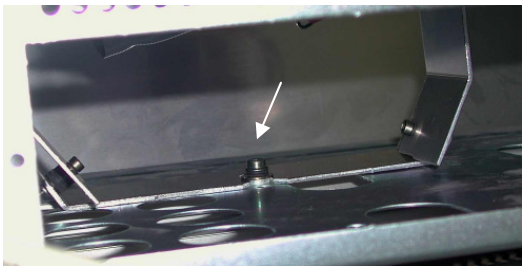
- Deinstall the CD Writer first by removing the 2 screws at the front, and unplug the IDE and power cable.

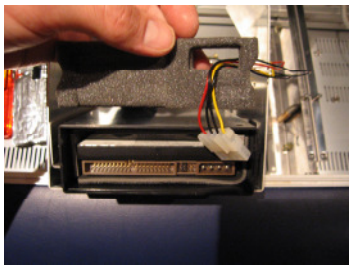
The frame is attached to the front panel with 4 screws (see left) and locked to the bottom frame with a mounting lug (2) or, in a later version B, suspended with a single screw at the bottom (3). For replacing disk proceed as follows.

- Remove the 4 front screw, and loosen the bottom screw in Frame B. You can then shift the frame back and lift it up

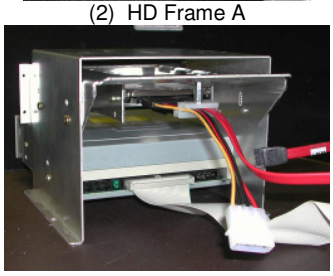


(2) HD Frame A





(3) HD Frame B

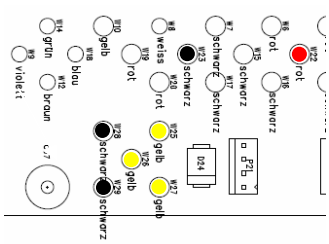


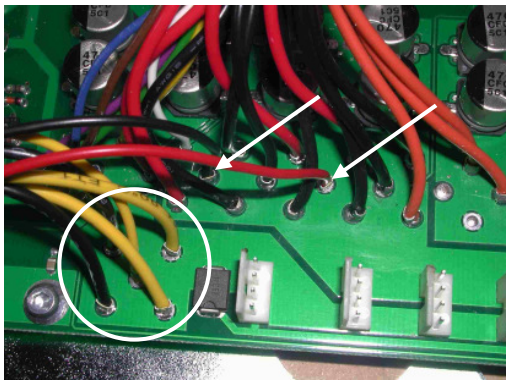
Remove the backcover of the harddisk enclosures and disconnecting the cables. Take the frame out of the desk and remove the harddisk IDE cables.

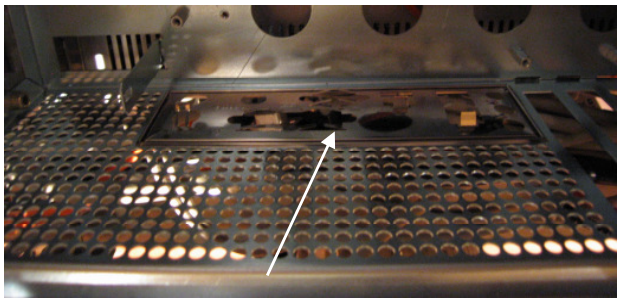
Remove the Harddisk from the frame and install the new harddisk frames with the serial ATA disks instead. Be sure to have the ATA cables labelled as SATA 1 (bottom) and SATA 2 (top)

4. Install Main Motherboard

4.1. An additional supply cable needs to be soldered to the Distribution Board. Plug in and solder the wires as indicated below. Use desoldering braid to clear the corresponding soldering terminals first.

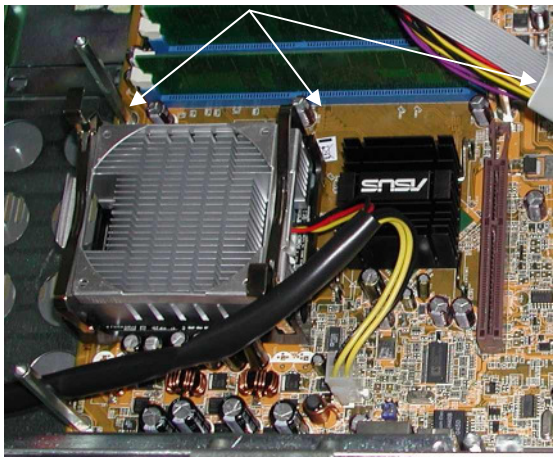


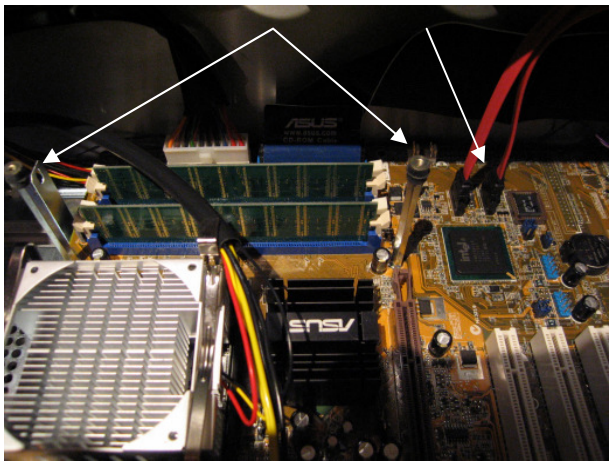




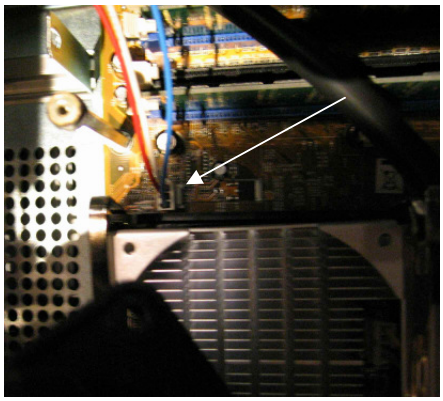
4.2 Install the new connector plate , mind correct position of contact springs. Attach new connector labels.

4.3 Mount the new preconfigured ASUS motherboard after installing the 3 additional bolts to the desk chassis at the rear of the board.

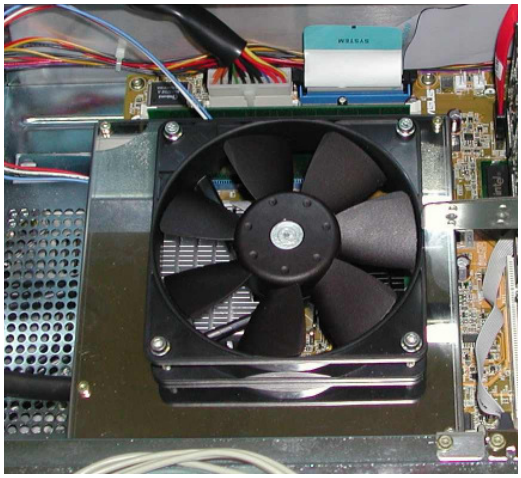




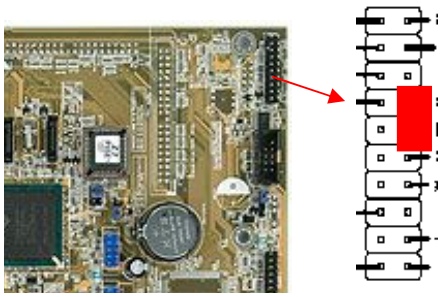
4.4 Connect Serial ATA cables (SATA1 at left, SATA2 at right). Add the 4 bolts with the rupper supports for the fan mounting



4.5 Connect fan supply and ...

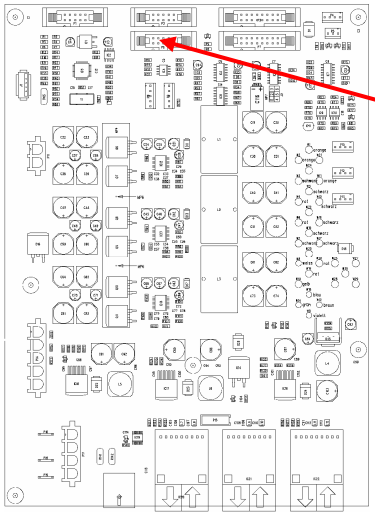


4.6 ... mount fan support with the M3x5 screws and washers.



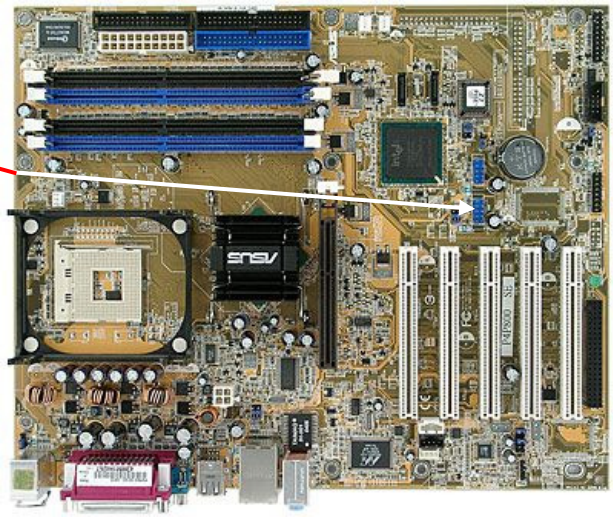
4.7 connect power on cable to pin 4,5 (edge)
(use new cable which is included in kit , if old one is too short)

4.8. Install new longer USB cable 1.949.151.94 from the redundant distribution board (front connector)

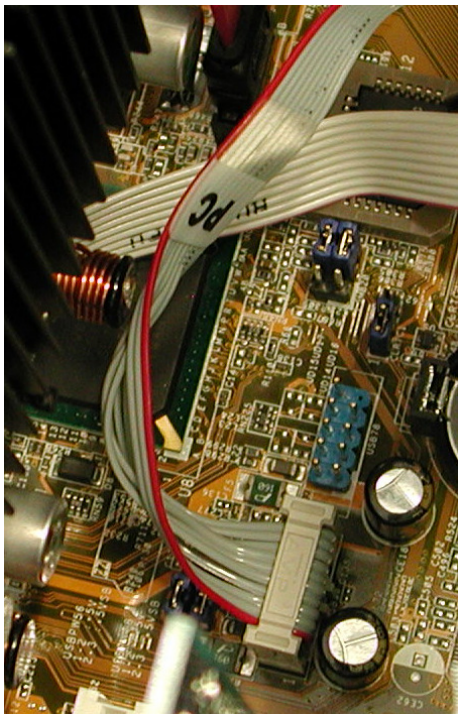


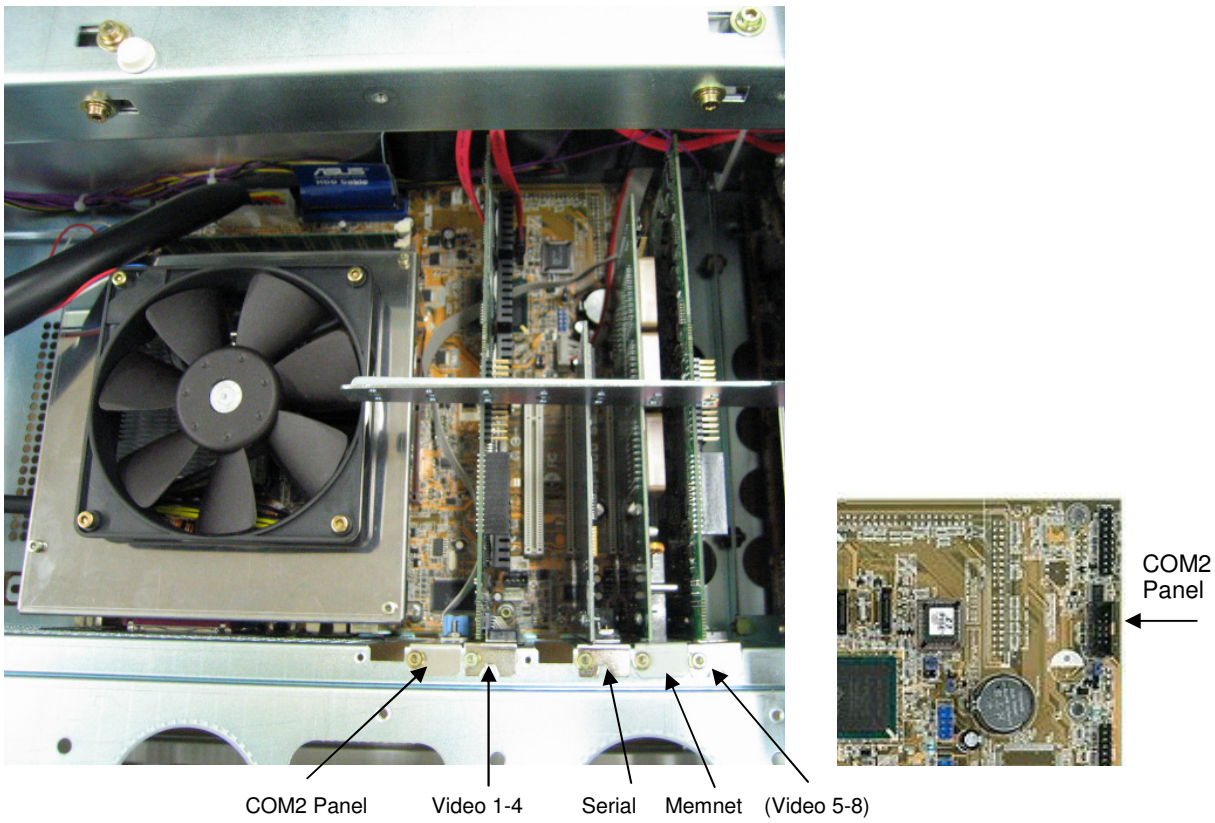
Redundant Distribution Board 1.949.152.00

to the main motherboard (cable end marked with “PC”), red wire at connector pin 1 (front)



Motherboard ASUS P4P800 SE



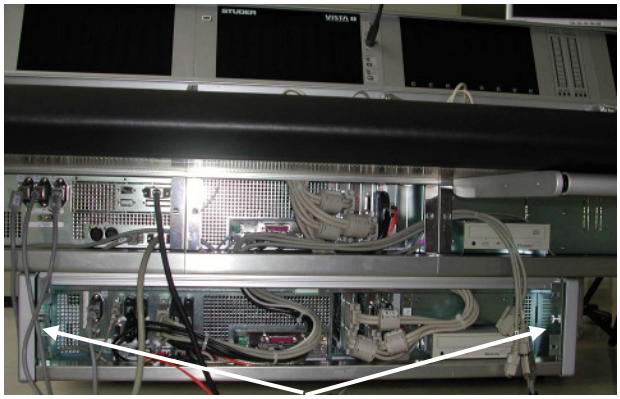


4.9. Install Com2 panel and connect cable to indicated position on motherboards.

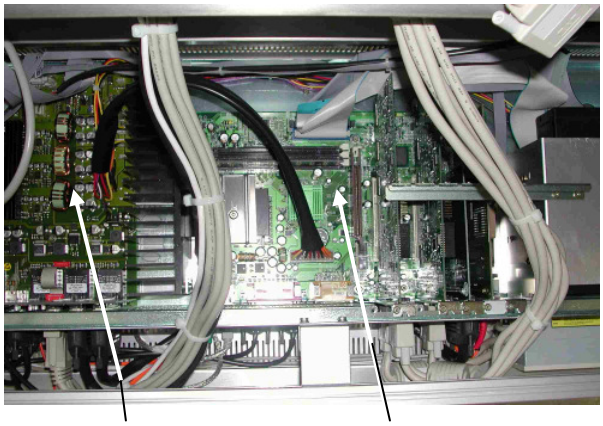
4.10 Reconnect cables to motherboard, insert PCI boards the documented positions and mount PCI card holder.

4.11 Connect cables to PCI cards as before. If required, remove cable clips to adjust cable length to the new card position. Fix cables with new clips.

5. Replace Redundant Motherboard

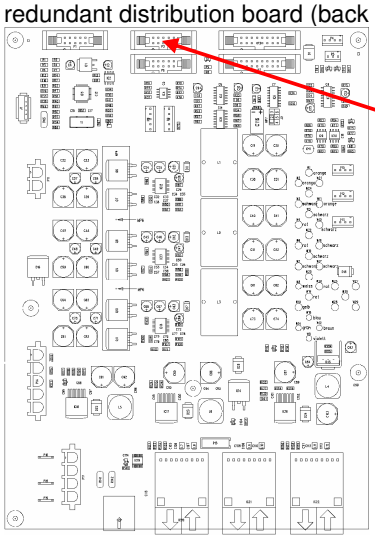


Unlock the redundant conrtol PC frame and swing it down.

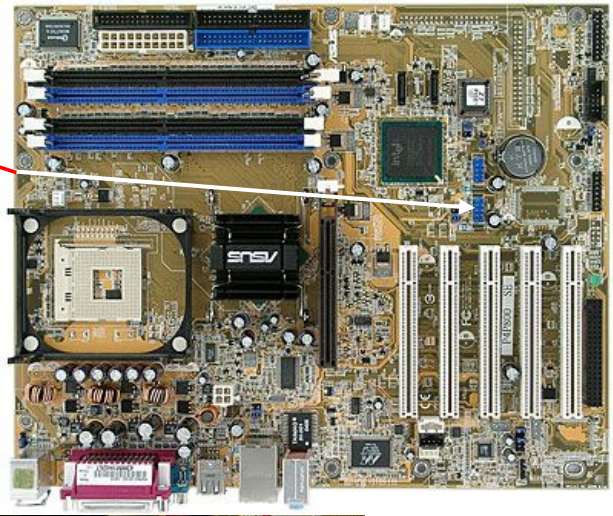


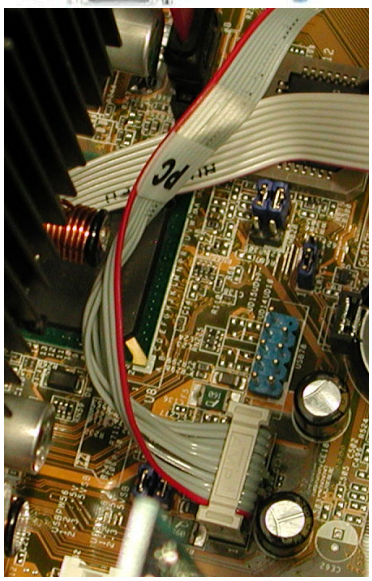
Repeat steps 2-4 for redundant PC system, in item 4.8 – connect as follows :

4.8. Install new USB cable 1.949.150.94 from the redundant distribution board (back connector)



to the redundant motherboard (cable end marked with “PC”), red wire at connector pin 1 (front)





6. Setup System

- install the removed bays.
- Connect the mains cables and power-up the system. The system should again start correctly. The following components have changed with the hardware :
  - RAID Controller is no longer an external hardware controller but a built-in SW controller
  - Backup software has been replaced (Image for Windows replaces PQ Deploy Center)

- Restore the user data from the backup medium both in main and redundant PC :
  - C:\D950systemdb
  - C:\D950projects
  - in C:\WinNT : d950system.ini
  - in C:\D950system : complete folder "users"
    d19devices.ini
    all monxxx.ini and sigxxx.ini files
    d950ofla.mop
    vista.ini
    staticautomation.ini

- If there was any additional, optional software installed on your system, please take care to have all necessary software available for doing the required installations (standard UPS software is included in package).