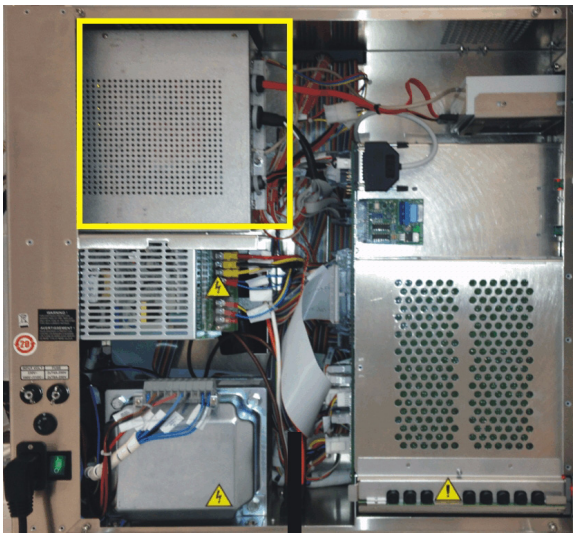
4 PC assembly

The PC Assembly is mounted in a rack located in the analyzer's frame, on the left side of it.

Fig. 1 - PC assembly



4.1 Components

4.1.1 PC assembly

- 1 motherboard, also called PC board, model *ETX 755* or, for serial number 0089, and from serial number 0189 on, ETX 845
- 1 I/O V4 board
- 1 PC backplane board
- 1 SATA hard disk
- *2 IDE SATA converters (if ETX 755 motherboard)**
- 1 SATA 5"1/4 DVD recorder (offset to the front panel)
- 2 2USB boards
- 1 SUBD PS2 adapter
- *1 IDE SATA protection board (if ETX 755 motherboard)**

*These features are built-in with ETX 845 motherboard.

Hardware and architecture mentioned in this chapter are subject to change depending on the PC features.
Operating system versions delivered with the ETX boards are different and are not interchangeable.

4.1.2 PC Assembly Interfaces

Front panel external connections

- 1 SATA port for the DVD recorder
- 1 USB 2.0 port

Internal connections

- 4 serial ports on a cable :

Port	Link Type	Usage
COM3	RS-232	Communication with the DC motor board
COM4	RS-232	Communication with the Positive IDentification (PID) board
COM5	RS-232	Communication with the measurement board
COM6	RS-232	Communication with the 4-axis board

- 1 I/O port
- 1 audio cable for the loudspeaker

Rear panel external connections

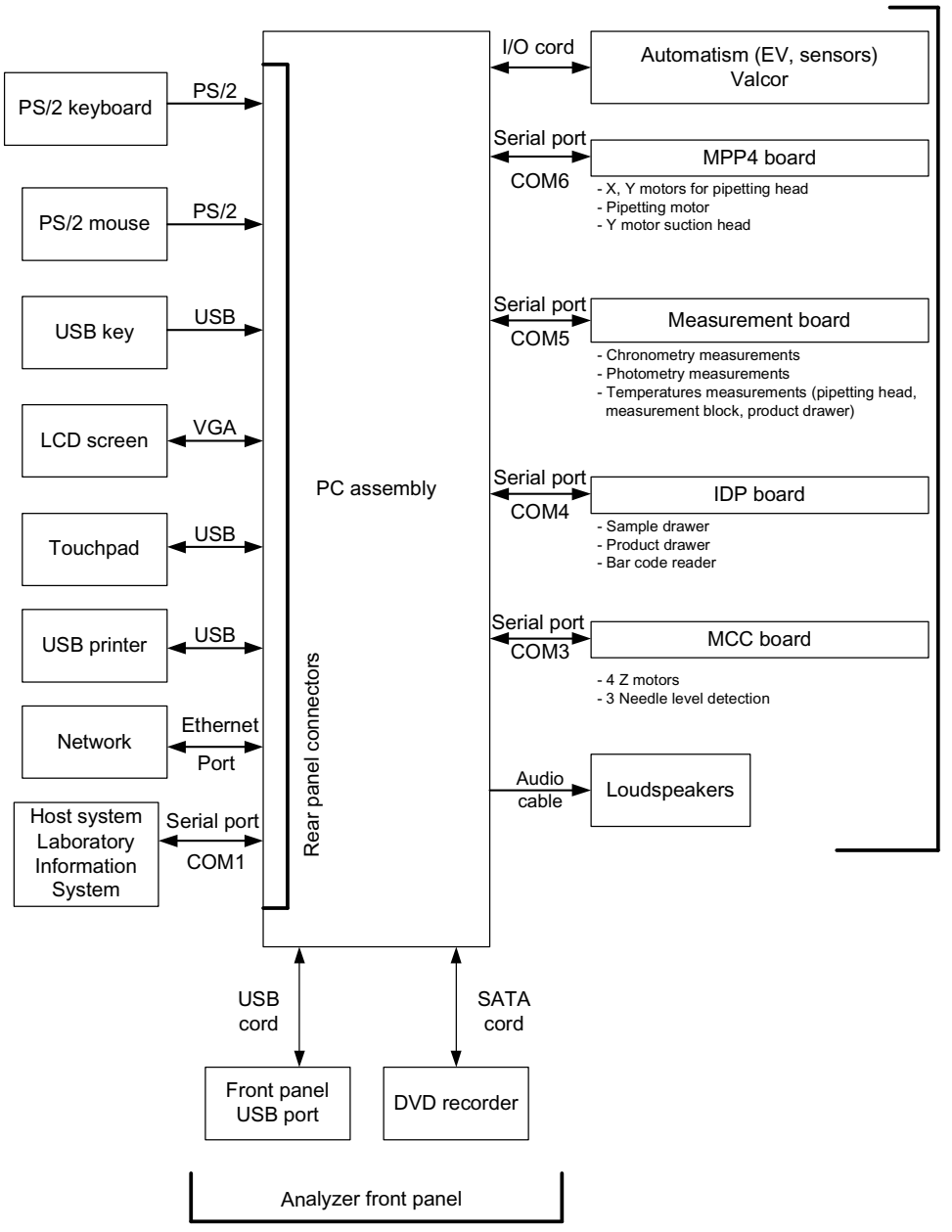
- 3 USB 2.0 ports
- 1 PS2 mouse port
- 1 parallel port (not used)
- 1 PS2 keyboard port
- 1 RS-232 serial port (COM1 for communication with the laboratory information system, also called "host")
- 1 VGA port
- 1 Ethernet network port

3 power supply lines

- + 5 V, + 12 V, - 12 V (GND is defined as the zero)

Only use devices supplied with the analyzer.
If the disconnection of a device is needed prior to an intervention, please make sure to reconnect it on its original location to avoid any setting changes.

Fig. 2 - PC Assembly Interfaces - I/O boundaries



4.2 Function

This PC assembly enables:

- an interaction with the user,
- the execution of application programs needed to run the analyzer,
- synchronization and communication between the modules and devices of the analyzer,
- communication with the central processing unit to control axis movements, measurements and positive identification.

Fig. 3 - Architecture of the PC Assembly Subset - ETX 755 board

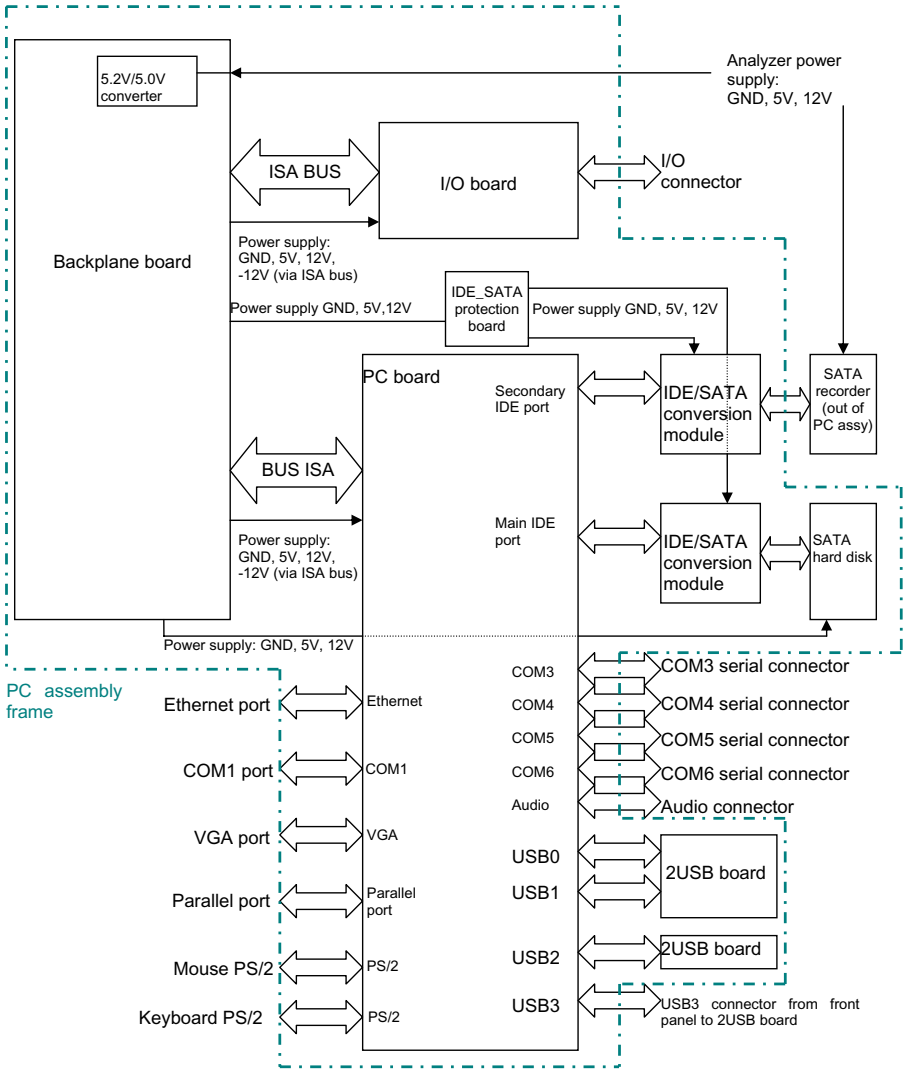
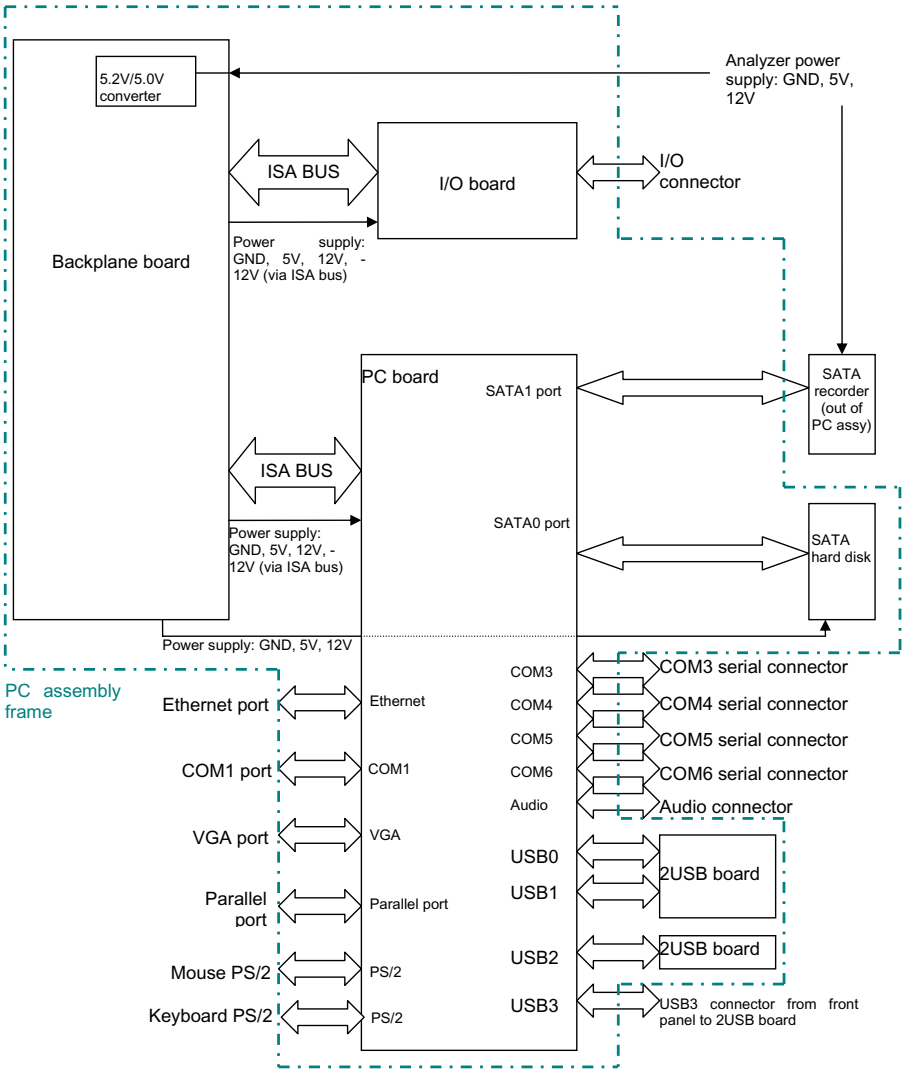


Fig. 4 - Architecture of the PC Assembly Subset - ETX 845 board



4.3 Theoretical Description of each Item of the PC Assembly

For further information about:

- the motherboard,
- the I/O board,
- the PC backplane board

see chapter 11, Electronic Boards.

4.3.1 SATA Hard Disk

Quantity	1
Location	PC assembly
Power supply	+ 5 V, + 12 V, GND
Capacity	At least 80 GB

Functions

- Hosting of operating system and software
- Storage of patient files
- Recording of the optical densities that are measured during the test, as well as of the quality controls, and their daily and monthly cumulative totals

4.3.2 Converter boards *(only with ETX 755 motherboard)*

Quantity	2
Location	PC assembly
Power supply	5 V, 12 V, GND

Function

- IDE/SATA conversion, one board for the hard disk and the other one for the DVD recorder

4.3.3 SATA DVD recorder

Quantity	1
Location	Front panel
Power supply	5 V, 12 V, GND

Functions

- Installation of the Operating System (OS) from a bootable DVD (the analyzer comes with the OS installed)
- Loading of the different versions of the STA Compact Max® software
- Backup and rereading of the customer data

4.3.4 2USB Boards

Quantity	3
Location	PC assembly
Power supply	5 V, 12 V, GND

Function

- Offset of 3 USB to the rear panel of the PC, offset of 1 USB to the front panel.

4.3.5 SUBD PS2 Adapter

Quantity	1
Location	PC assembly
Power supply	5 V, 12 V, GND

Functions

- Offset of SUBD25 (printer) to the rear panel of the PC
- Offset of PS2 (mouse)

4.3.6 IDE SATA Protection Board *(only with ETX 755 motherboard)*

Quantity	1
Location	PC assembly
Power supply	5 V, 12 V, GND

Function

- Protection of IDE/SATA boards by means of energy limitation