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DASDEC-1EN Schematics

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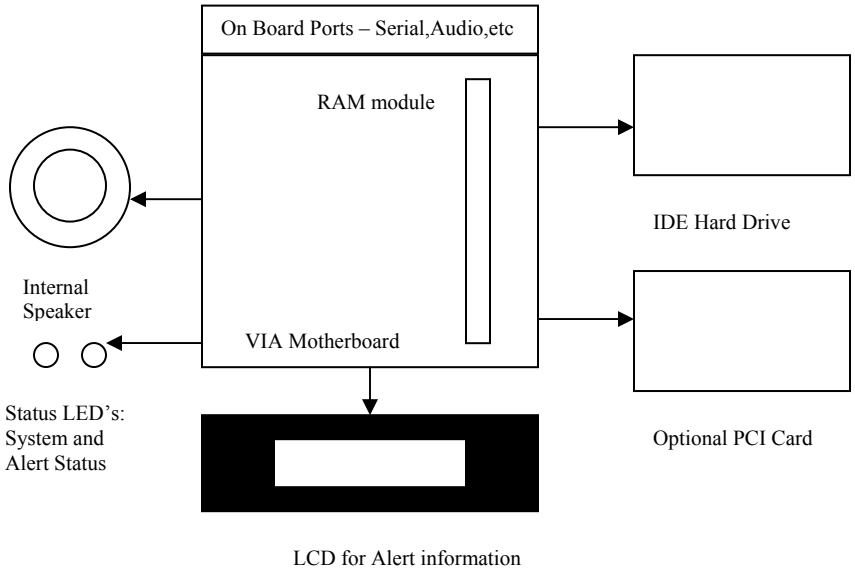
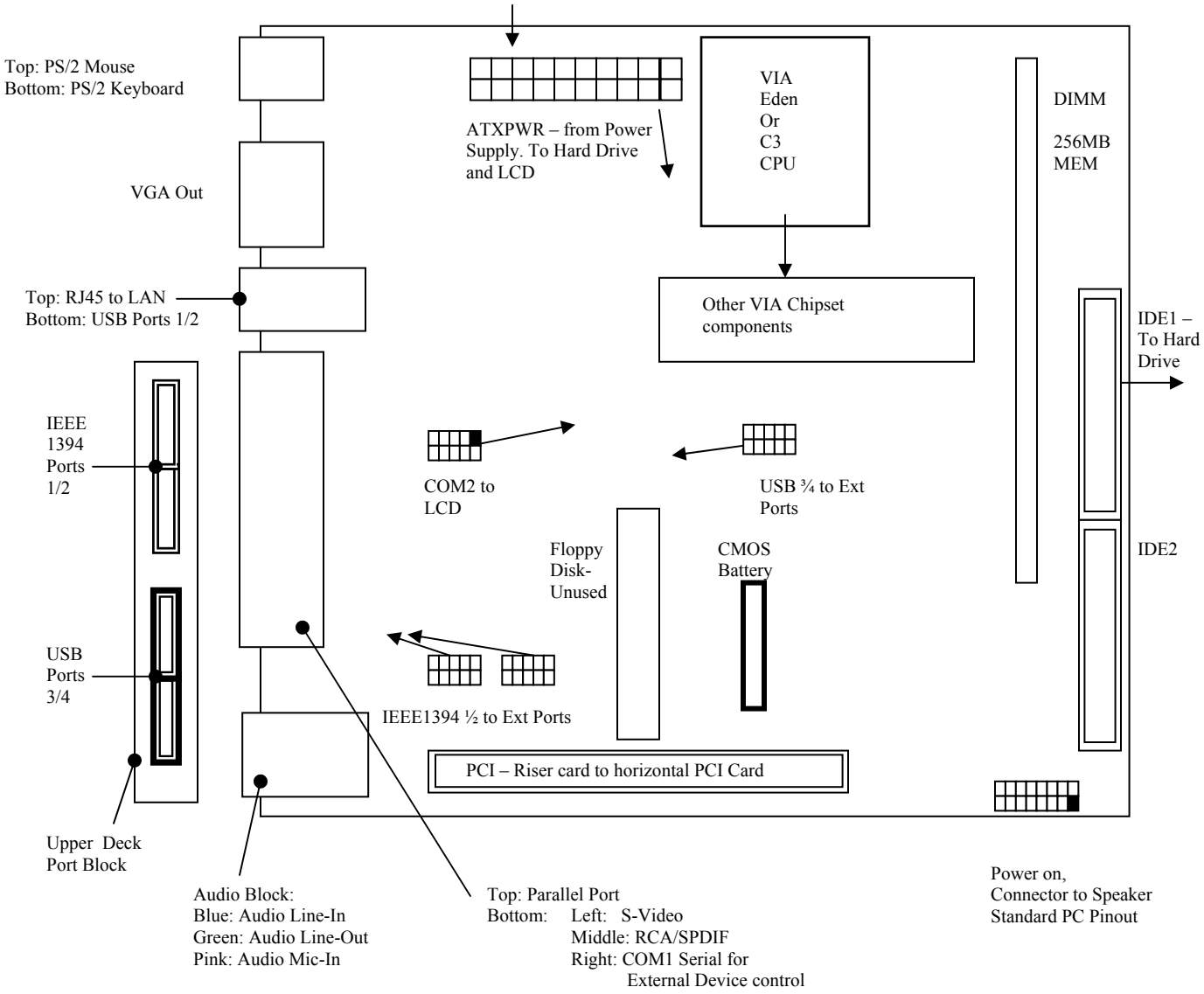
The DASDEC-1EN ES Encoder/Decoder is constructed from commercially available PC platform hardware. The DASDEC software can run upon a wide variety of hardware. The specific hardware chosen for the DASDEC-1EN was based on specific features and price. The VIA EPIA-M motherboard was chosen. This is of course the heart of the system. Other important parts include an 2x20 character LCD display, IDE hard drive or flash drive, RAM memory, an optional sound card, 2 status LED's, and a simple speaker. The chosen LCD is the LK202-25 from Matrix Orbital. The DASDEC-1EN is controlled via a LAN and/or external Serial Port and/or by Keyboard/Mouse/VGA monitor display . It displays state via the LCD and also via a VGA monitor.

Here is a diagram of the overall schematics of the DASDEC-1EN, which is in essence, a personal computer equipped with an LCD:



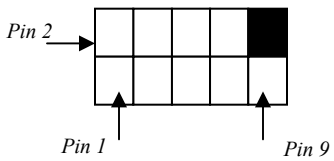
See below for the layout of the VIA motherboard and the Matrix Orbital LCD.

DASDEC oriented VIA motherboard schematic & layout

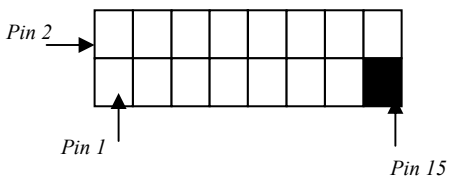


Important Connector Pinouts:

COM2 Serial Port



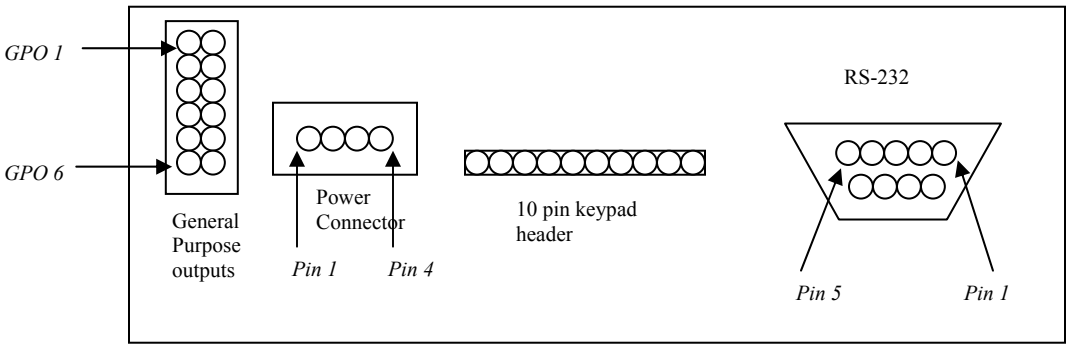
Power On, Speaker



Pin 6: Power On+ Pin 7: Speaker+
Pin 8:Power On- Pin 13: Speaker -

For more details refer to VIA Users Manual for EPIA-M series.

Matrix Orbital LK202-25 LCD schematic:



* Connector	Function *
General Purpose Outputs	2 Status LEDs, optional GPO relay control GPO1 Green LED System status GPO2 Red LED EAS Alert status GPO3-6 available for external GPO relay control
4 pin power	LCD power (5.0VDC), unused I2C comm. Pin1 +7 to +15 VDC Pin2 I2C SCL clock Pin3 I2C SDA data Pin4 Ground
10 pin keypad header	generate 25 key states-optional GPI input
DB-9F	RS-232 connection to VIA motherboard COM2 serial port Pin2 Data from LCD Pin3 Data to LCD

For more details refer to Matrix Orbital Users Manual for LK202-25.