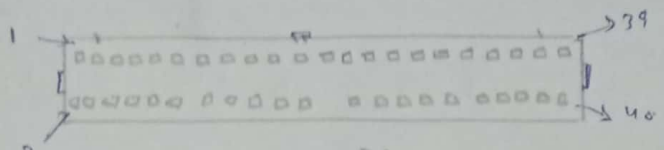
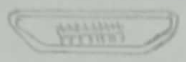
Dawood Sarfraz

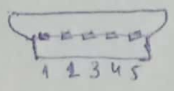


20 blocked

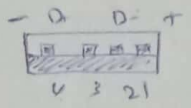
PATA



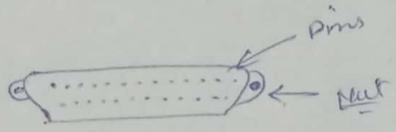
HDMI



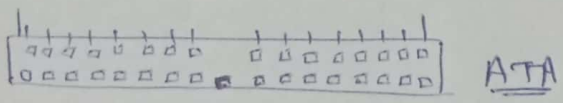
Pinout of Mini USB



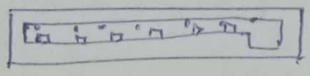
USB Pinout



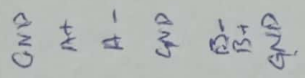
SCSI

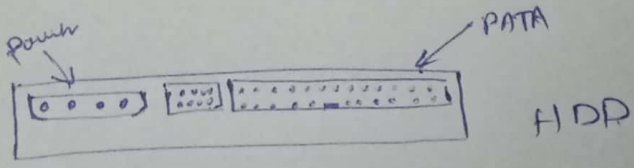


ATA

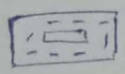


SATA





HDD



Pinouts

Name: Dawood Saafraz

Roll no: 20P-0153

Section: BSCS-6B

Assignment: Parallel and distributed computing

SSD:→

Solid state Drive, is a Type of storage device that uses NAND-based flash memory to use to store data. It has no moving parts, making it faster and more reliable than traditional hard drives. It improve performance & reduce consumption power. Its transfer rate is 560MBps.

HDD:→

It is a storage device that uses magnetic disks to store & retrieve digital data. It is a non-volatile storage device, meaning data is retained even when the power is off. These were slow & now being replaced by faster and more efficient devices (SSD). HDD with SATA III has 200MBps rate.

HDMI:→

High definition Multimedia Interface is a digital interface for transmitting high-quality audio & video signals b/w devices. It support resolutions upto 4K and is widely used in modern electronics, such as TVs, monitors and gaming consoles. Easy to connect & provide a reliable, high-quality signal. Latest version HDMI 2.1 has data transfer rate of 48-GBps. (Gigabits per seconds).

SATA:→

Serial advanced Technology Attachment is a computer interface used for connecting storage devices to a motherboard. Its a successor to the older IDE interface and has high data transfer rates. SATA cables have a thinner & longer design compared to IDE cables, allowing for better airflow & cable management inside the computer case. It depend on specific versions but have ~~300/600 MBps~~ 6GBps & 7 pins (Megabits per second).

USB:→

Universal Serial bus is a widely used standard for connecting devices to computers. It allows for easy plug-&-play connectivity and can transfer data, power, and audio/video signals. There are several types of USB connectors USB-A, USB-B, USB-C, and micro-USB. USB 2.0 has 480 MBps & USB 3.0 has 5GBps. 3 to 5 Gbps

MiniUSB:→

Mini USB is a small, rectangular USB connector used to connect devices to computers or other devices. It was commonly used in the past for digital cameras, MP3 players, & other small devices, but has been largely replaced by micro USB & USB-C connectors. It supports USB 2.0 speeds and can transfer data and power. i.e 480 Mbps

Firewire 1394:→

Firewire 1394 is a high-speed interface standard used for connecting devices to a computer. It was developed by Apple and Sony in late 1990s and was commonly used for devices such as cameras, external hard drives, and audio interfaces. It has largely been replaced by other standards such as USB and Thunderbolt. Its speed is 800 MBPS. 6 to 9 pins.

PATA:→

(PATA) Parallel Advance Technology Attachment is a standard for connecting hard drives into computer systems. It is made by 40-conductor ribbon cables & lately replaced by 80-conductor cables in which every other conductor is grounded & minimize mutual capacitance blw conductors. It offers faster transfer speeds by newer (SATA) interface, which offers faster transfer speed & better reliability. Its speed is 66/100/133 MBps.

ATA:→

An interface used to connect storage devices such as SSD, HDD 6GB.
CD/DVD drives to motherboard almost 40-80 pins. ATA-8 upto ~~8~~.
ATA-1 upto 8.3MB.

SCSI:→

Small computer system Interface is an interface standard. used for connecting various peripherals to a computer including ~~hard~~, hard disk, drives, tap etc. Its speed is 320MBs. & Pin 50 to 80.