Memory

Digital Data Storage/Hard Disk Drives

Hard Disk Drive

Hard disk drive is often shortened to “hard drive,” or “hard disk.” These terms all usually refer to the same thing— the place where digital data, such as computer files and folders is stored. A hard drive is a rigid metal disk coated with a magnetic material where digital data is stored (magnetically to stay on the drive even after the power supply is cut). The data is stored on a stack of disks mounted inside a solid encasement. Data is accessed in a random-access manner, so that individual blocks of data can be stored or retrieved in any order and not only sequentially. HDDs are a type of non-volatile storage, retaining stored data even when powered off.

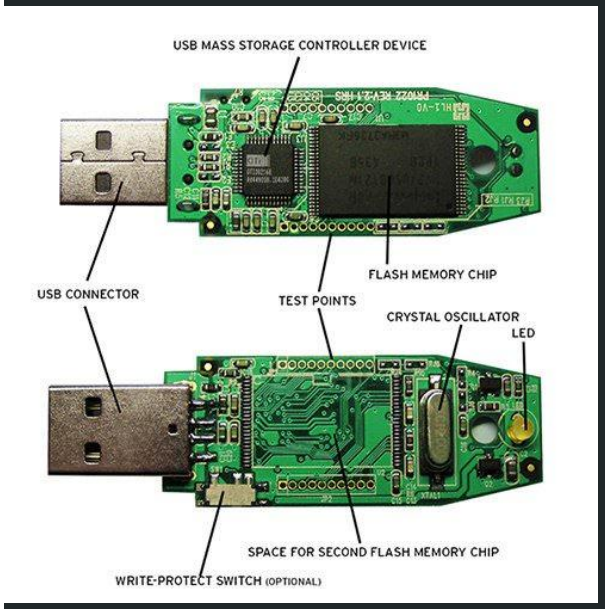
The first hard disk drive was produced by IBM in 1957 and about the size of two refrigerators, while on retaining 3.75 MB. After this model, IBM produced a new disk storage unit in 1962, which was even larger, but held much more data and accessed them in a quarter of a second.

Modern hard drives record data by magnetizing a thin film of ferromagnetic material on both sides of a disk. Sequential changes in the direction of magnetization represent binary data bits. The data is read from the disk by detecting the transitions in magnetization. The amount of storage on a hard disk is measured in gigabytes and terabytes. Hard drive capacity is measured by the amount of data users need to store, which is often much greater than the space applications take up. All computers used to have an internal hard disk for storage; however, today, storage can be solid state (SSD). External hard disks can be plugged into a USB port for more storage.

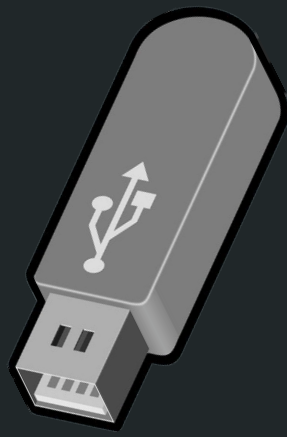
A solid state drive is an all-electronic non-volatile storage device that is an alternative to hard disks. Employed in a myriad of products, including mobile devices, iPods, cameras, laptops and desktop computers, SSDs are faster than hard disks because there is zero latency (no read/write head to move). They are also more rugged and reliable and offer greater protection in hostile environments. In addition, SSDs use less power and are not affected by magnets. A SSD is flash storage and has no moving parts. As a result, they’re smaller and take up less space in a PC case, in some instances even mounting directly to the motherboard. SSD storage is much faster than its HDD equivalent, which is made of magnetic tape and has mechanical parts inside. They’re larger than SSDs and much slower to read and write.

Hard Disc Drive

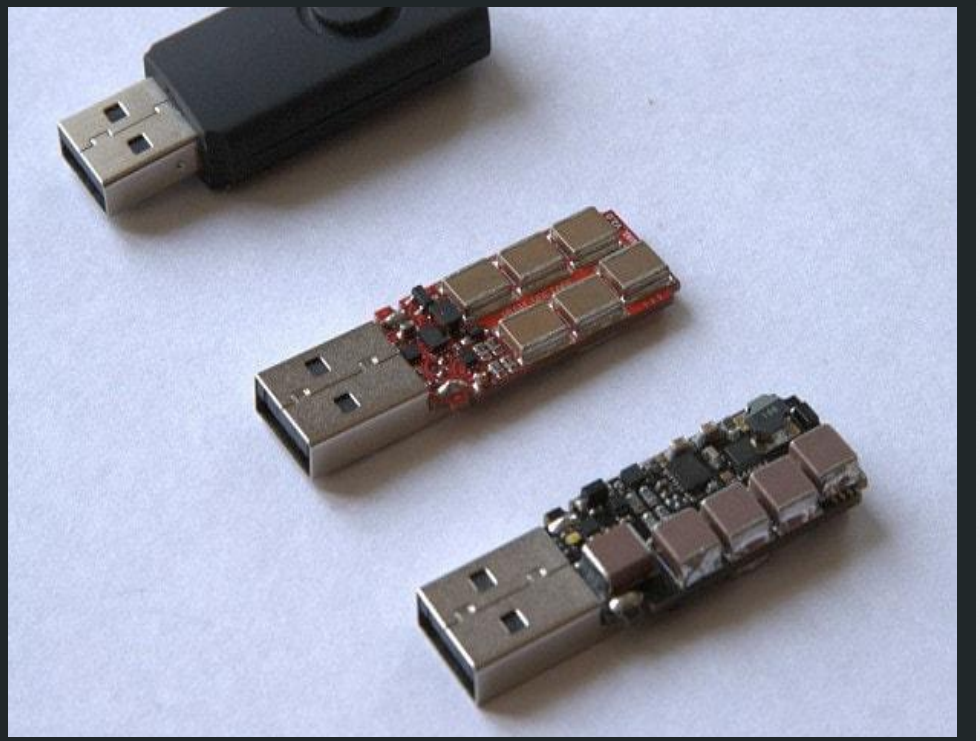
Solid State Drive

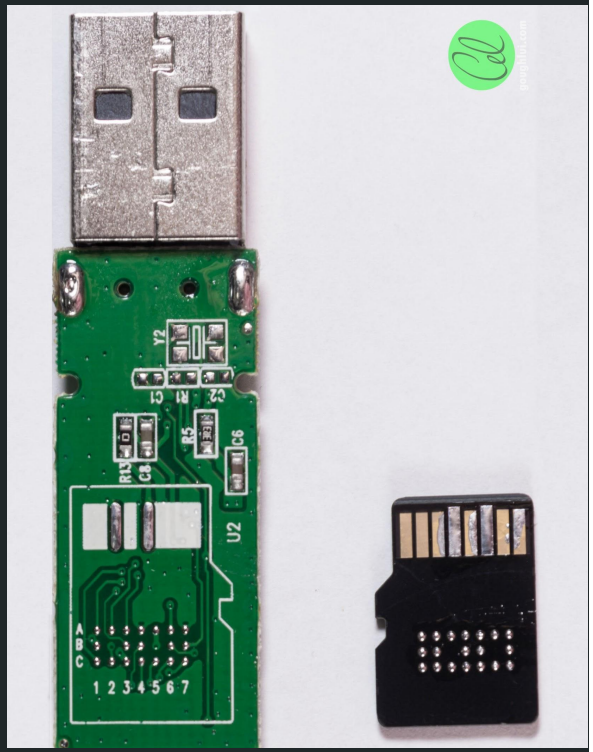

USB MASS STORAGE CONTROLLER DEVICE
USB CONNECTOR
TEST POINTS
FLASH MEMORY CHIP
CRYSTAL OSCILLATOR
LED
SPACE FOR SECOND FLASH MEMORY CHIP
WRITE-PROTECT SWITCH (OPTIONAL)


Memory Stick PRO Duo
compatible
micro SD



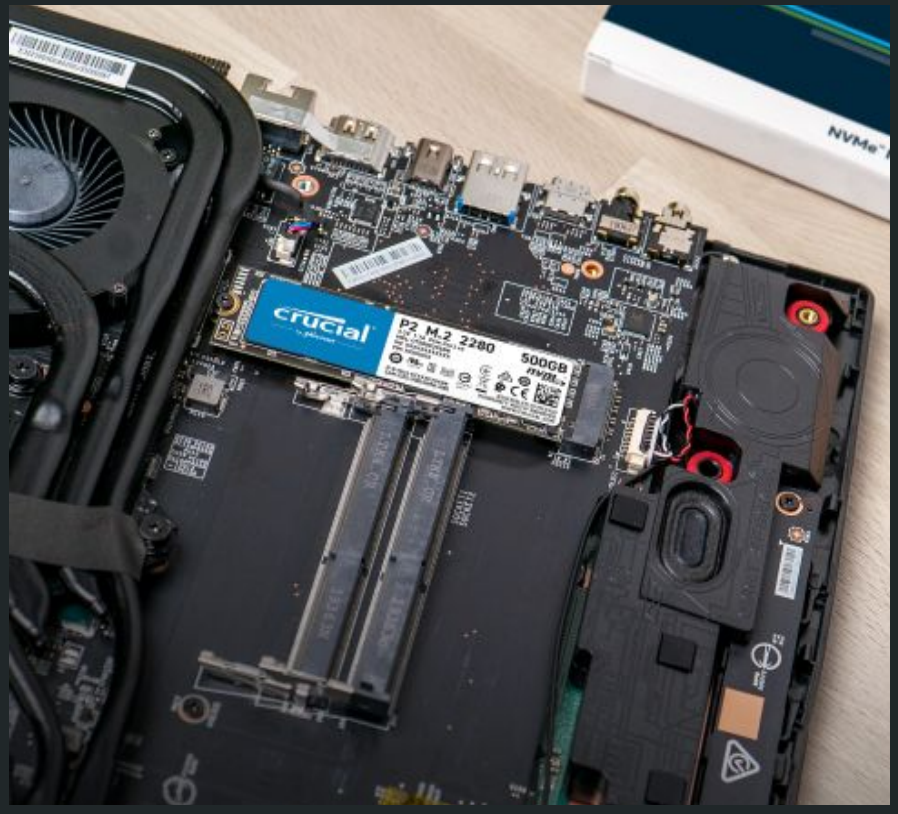

USB2.0
2GB

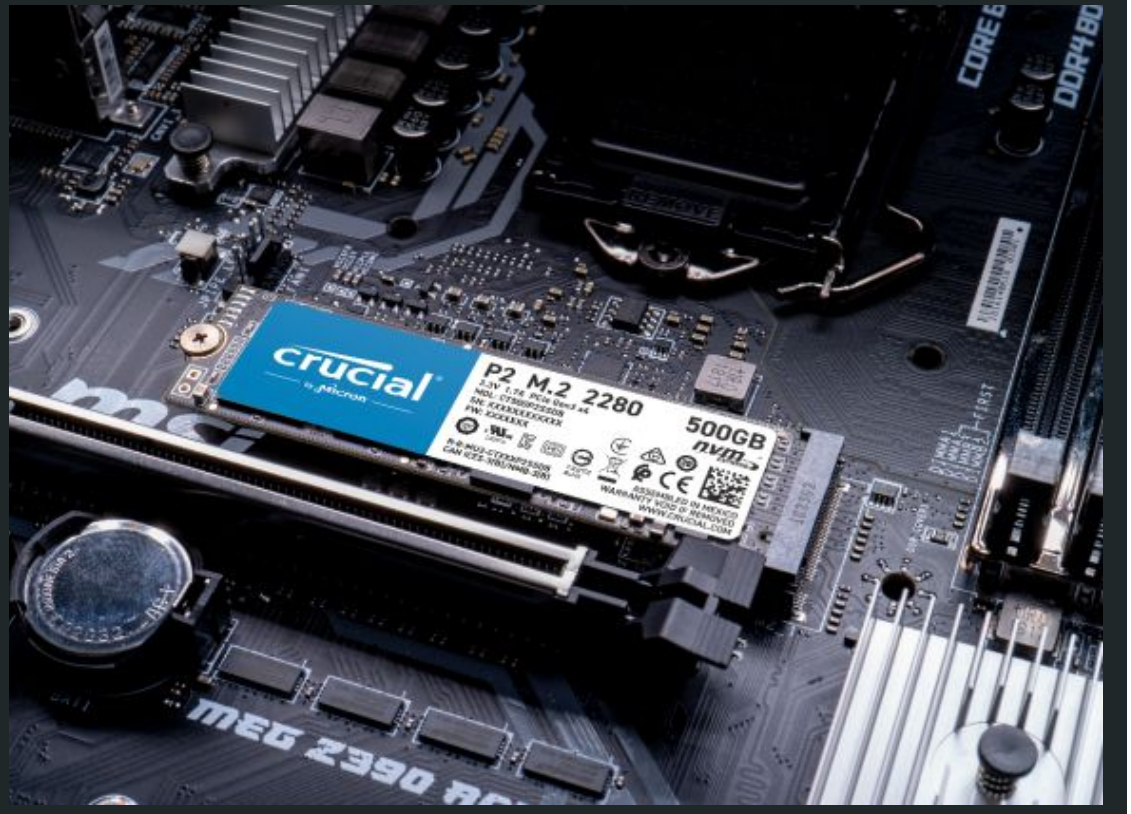



U2
1 2 3 4 5 6 7


M.2


Micron
Intelligence
Accelerated
5200
2.5-inch SSD | SATA


crucial
P2 M.2 2280
500GB
NVMe


crucial
P2 M.2 2280
500GB
nvm
MEG 2390

Core Concept

Audience: This museum appeals to adults with basic knowledge of computers and have an interest in learning about technological memory/storage devices, their history and how they have evolved over time.

Traits:

Modern
Professional
Techy
Sleek

Proposed Names

Museum of Memory

Institution of Memory

Museum of Digital Memory

Digital Memory Museum

Hall of Digital Memory

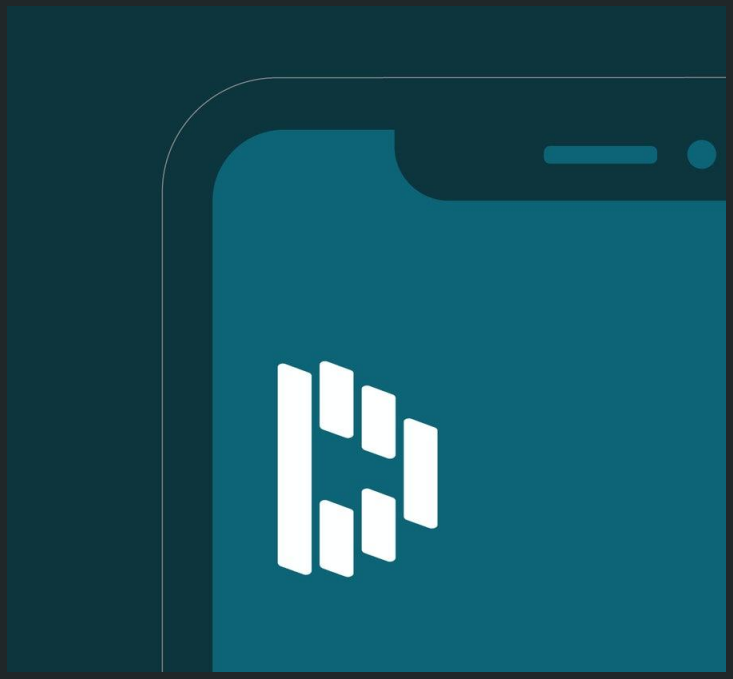
Institution of Digital Memory

Institution of Digital Data

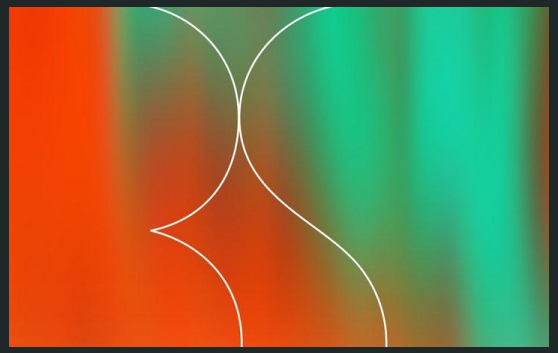
Digital Data Institution

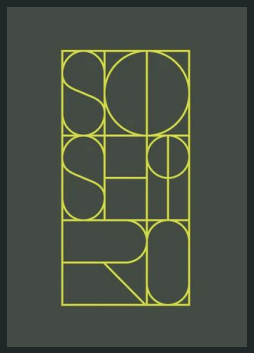
Institution of Digital Data Storage

Hard Drive Museum




WWSf
World
Wide
Storefront

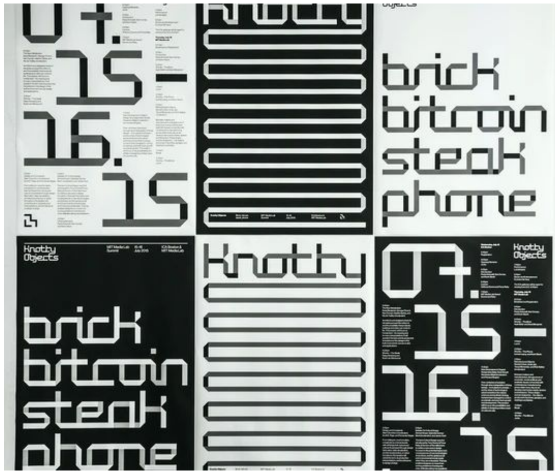




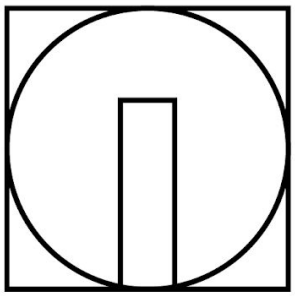

ROLLS-ROYCE
MOTOR CARS

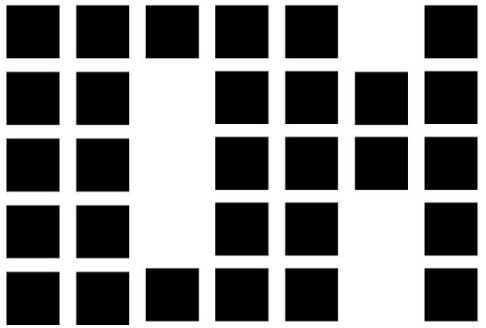

T&I
Art 02 / Fashion 26 /
Photography 30 / Film 40 /
Music 44 / Popular
Culture 46, 84 / History 48, 56 /
Ancient History and
Archeology 50 / Victoria
and Albert Museum 64 /
Design 86 / Lifestyle 88 /
Architecture 91 / Travel 196 /
Mythology, Philosophy
and Religion 101 /
Decorative Arts 104 /
Gift 108 / Highlights 110 /
dex 122 / Sales and
tion Contact

The Tech
Museum of Innovation

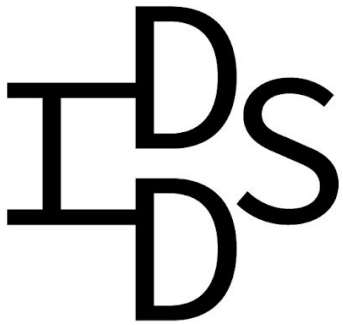


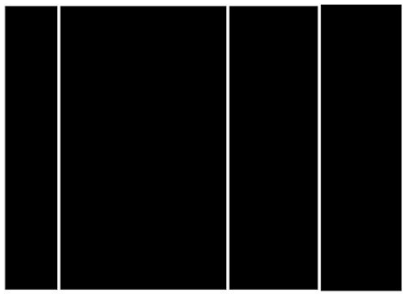
Institution of Digital Memory:

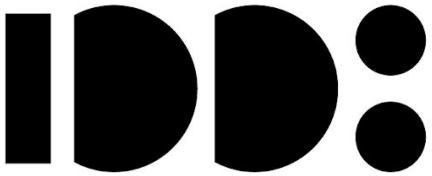


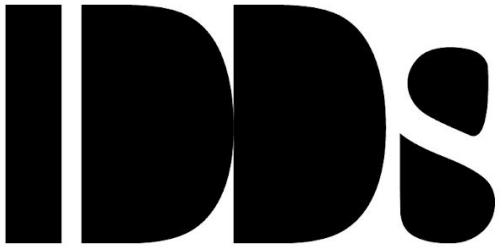


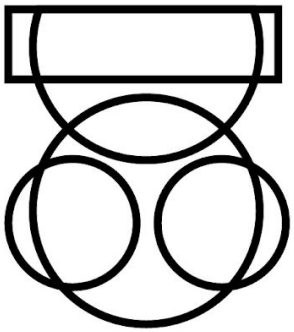
Institution of Digital Data Storage

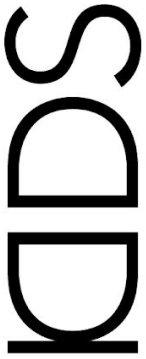


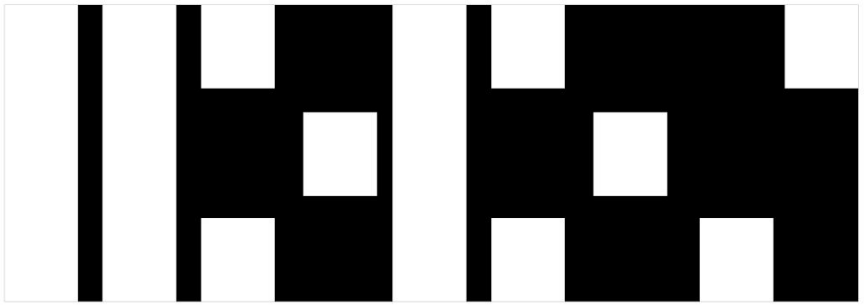






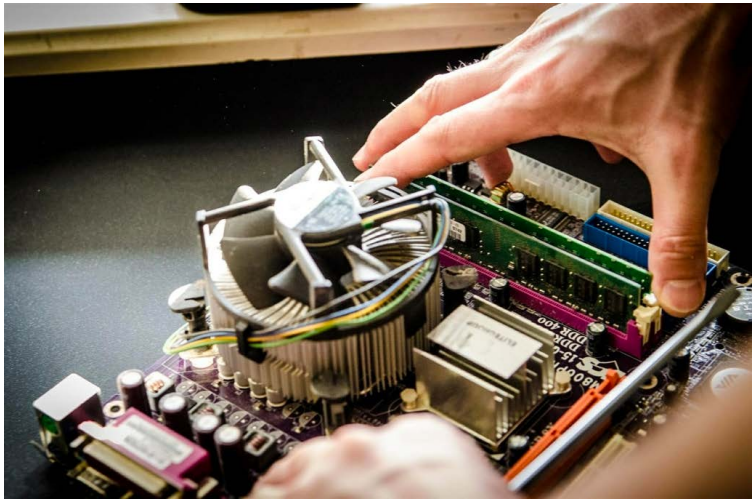


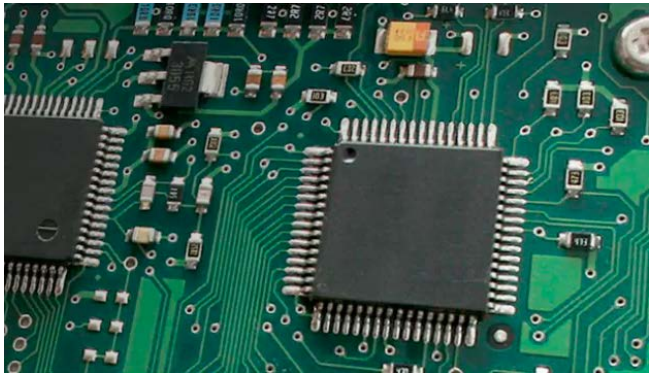




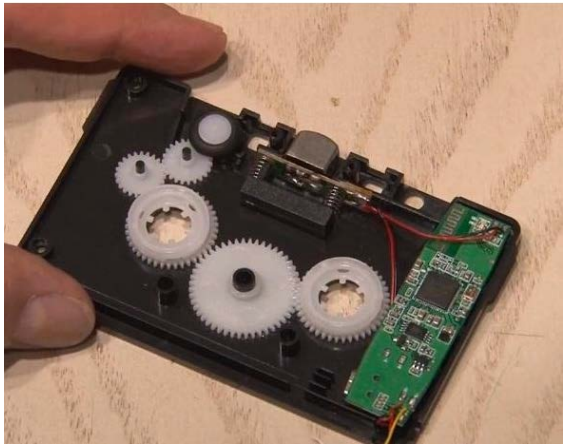
research

One of the earlier ways to store data was in hard disk drives. Binary data is represented on both sides of the disc through a film of magnetic material and read by the changes in magnetization. Computers used to utilize hard disk drives. However, they have been replaced by soft state drives (SSD) over time. In fact, when we think of physical external drives today, we are most likely thinking of SSDs. Not only are SSDs physically smaller, they are also faster and more reliable as they do not rely on magnets. Nowadays, cloud and online data storage is becoming more and more popular. With services like iCloud, Dropbox and Google Drive, physical data storage devices are gradually becoming obsolete. These online storage services are more convenient for users when transferring data between multiple devices, or even just searching for files. Online storage is simply just storing data across many physical servers managed by a hosting service who keeps the data in the servers easily accessible for users and customers.

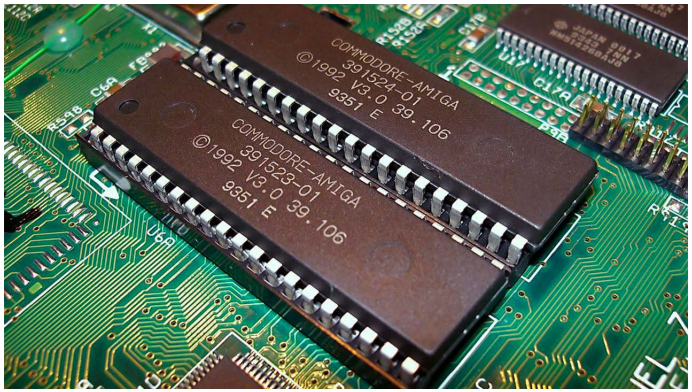





BACKBLAZE




USB3.0-up to 5Gbps
USB 3.0
5 Gbps
USB 2.0
480 Mbps


COMMODORE-AMIGA
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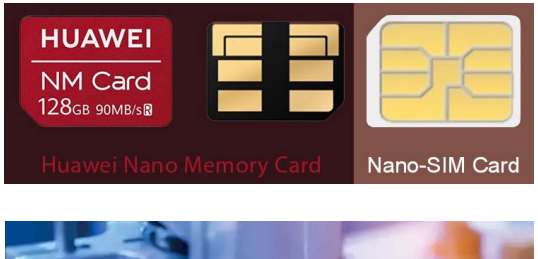
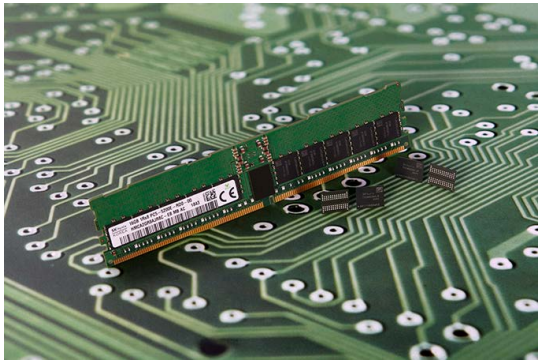
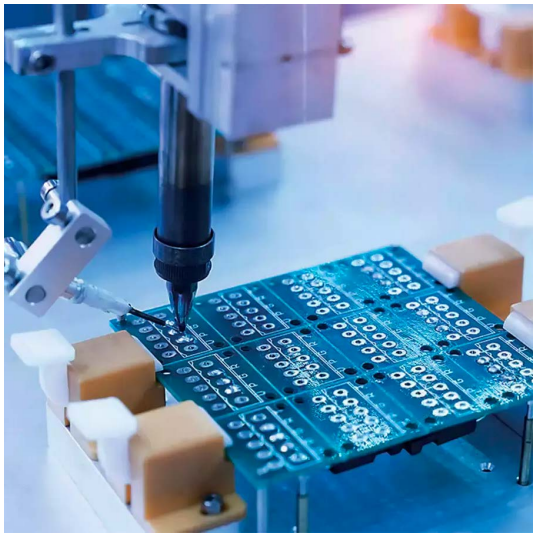
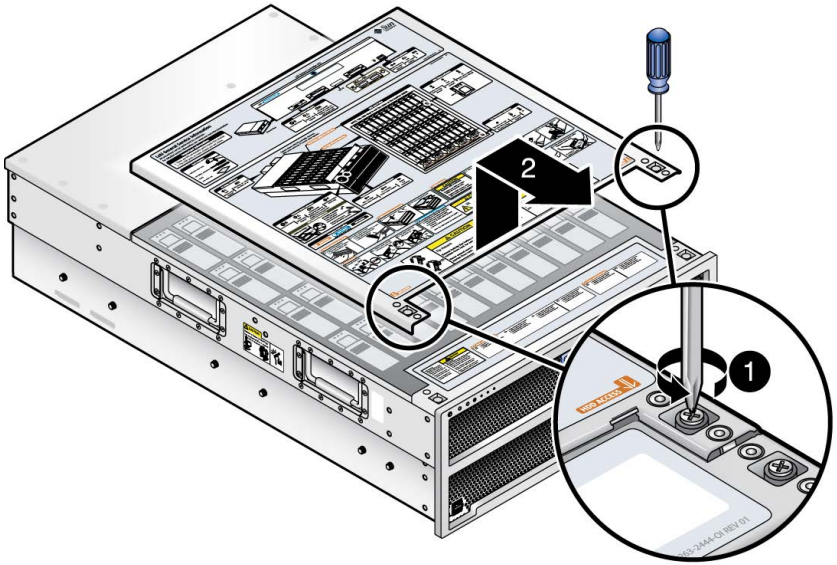
©1992 V3.0 39.106
9351 E


HUAWEI
NM Card
128GB 90MB/s
Huawei Nano Memory Card
Nano-SIM Card






AMIBIOS
AMERICAN
MEGATRENDS
P7992111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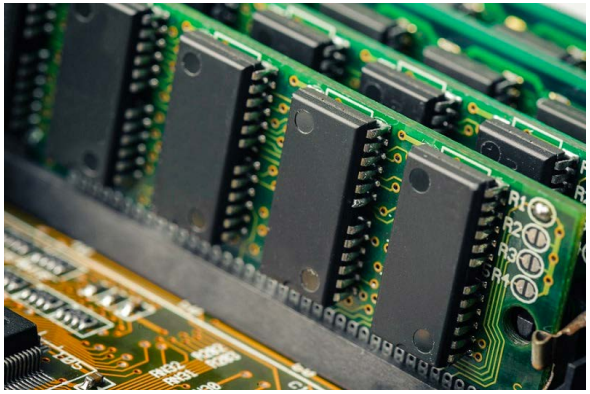
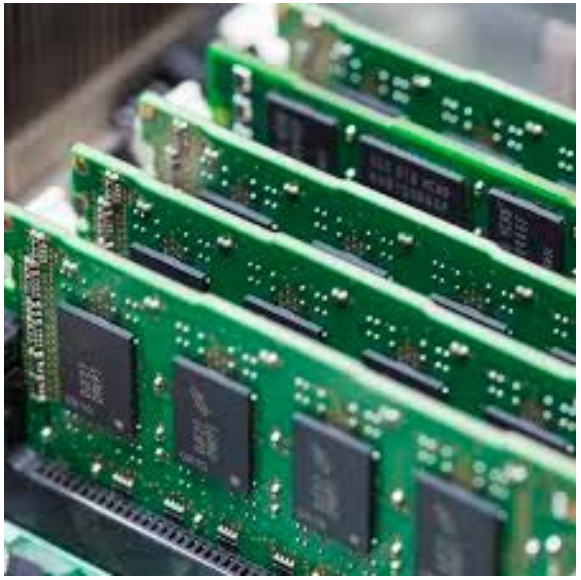
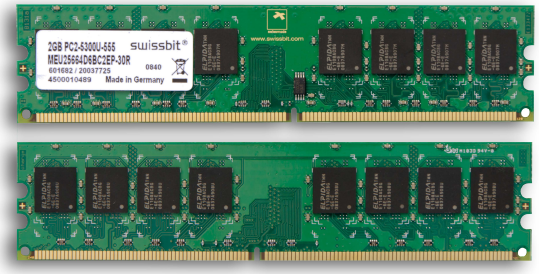


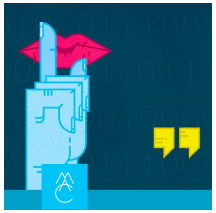



Hard Disk
RAM
ROM
CD/DVD
Floppy
Memory Card
Pen Drive
Tape

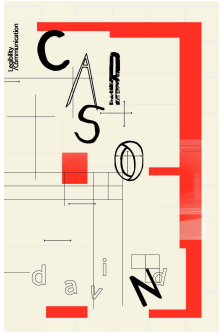


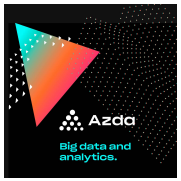

INDEX
A
TYPE I (NORMAL) POSITION
CHF90

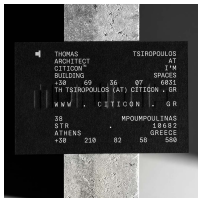
logo inspiration

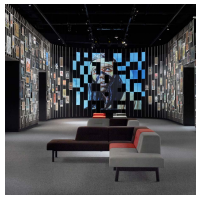






concept and audience

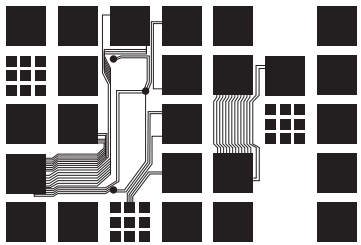
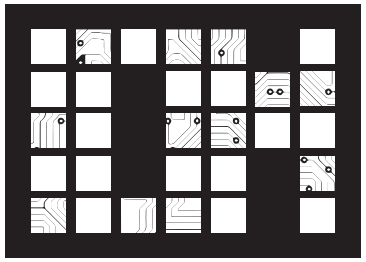
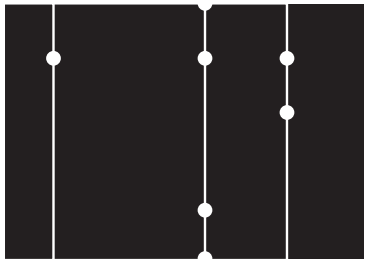
The Institution of Digital Memory is a museum that appeals to young or middle-aged adults with basic knowledge in computing. IDM hopes to educate adults and also celebrate the technological evolution and history of digital memory and storage.

Modern

Professional

Techy

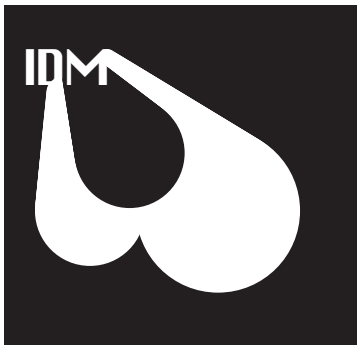
Sleek

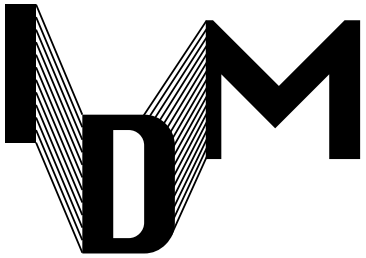
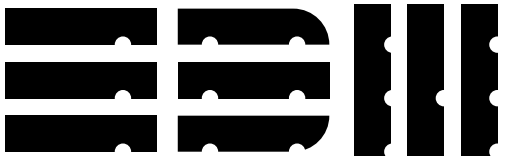
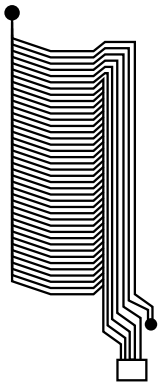
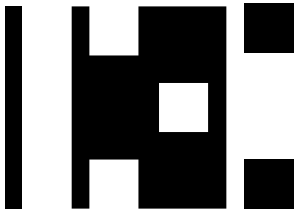
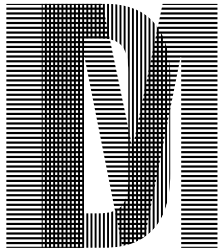
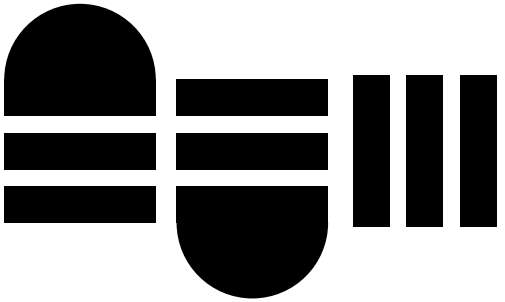
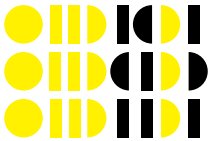
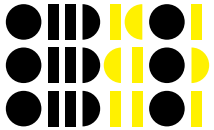
IDM

IDM

IDM



IDM

IDM

museum of digital memory

Allison Hao

Museum of Object Project - Logo

Graphic Design 4

concept, audience and values

With the rapid advancement of technology, new inventions quickly become obsolete and forgotten. The Institution of Digital Memory is a museum commemorating technology that helps us to remember. This includes, hard disk drives, solid state drives, and cloud storage. IDM hopes to educate adults, while also celebrating the technological evolution of how we store virtual data.

IDM appeals to young or middle-aged adults with basic knowledge in computing, taking them through the history and development of digital memory and storage. While IDM explains and summarizes how the various data storages, it hopes to focus more on the history and evolution of devices and technology rather than the mechanics. It welcomes visitors who are interested in the history rather than the science.

Modern

Professional

Techy

Sleek

proposed names

Stage 1:

Museum of Memory
Institution of Memory
Museum of Digital Memory
Digital Memory Museum
Hall of Digital Memory
Institution of Digital Memory
Institution of Digital Data
Digital Data Institution
Institution of Digital Data Storage
Hard Drive Museum

Stage 2:

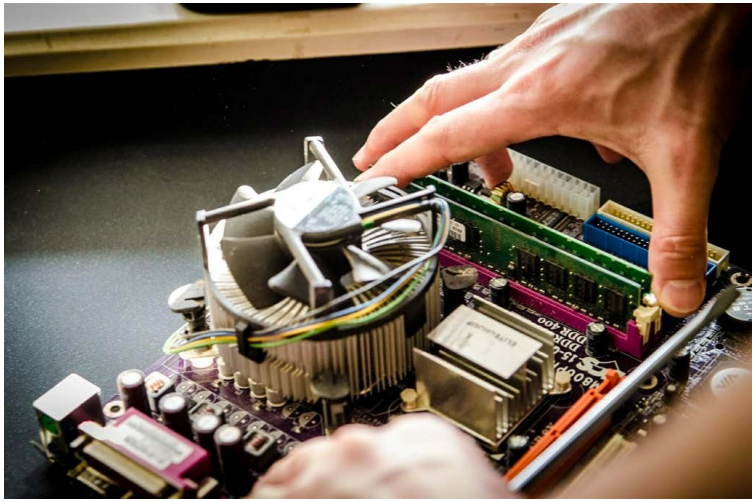
Institution of Digital Memory
Institution of Digital Data Storage

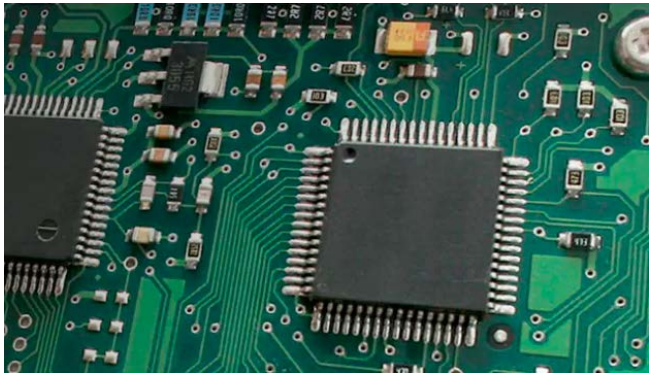
Final stage:

Institution of Digital Memory

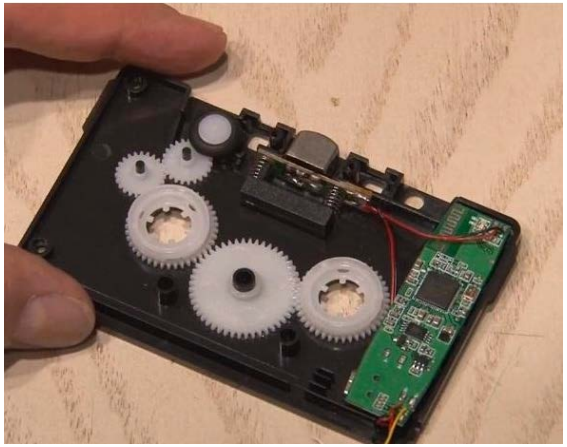
research

One of the earlier ways to store data was in hard disk drives. Binary data is represented on both sides of the disc through a film of magnetic material and read by the changes in magnetization. Computers used to utilize hard disk drives. However, they have been replaced by soft state drives (SSD) over time. In fact, when we think of physical external drives today, we are most likely thinking of SSDs. Not only are SSDs physically smaller, they are also faster and more reliable as they do not rely on magnets. Nowadays, cloud and online data storage is becoming more and more popular. With services like iCloud, Dropbox and Google Drive, physical data storage devices are gradually becoming obsolete. These online storage services are more convenient for users when transferring data between multiple devices, or even just searching for files. Online storage is simply just storing data across many physical servers managed by a hosting service who keeps the data in the servers easily accessible for users and customers.

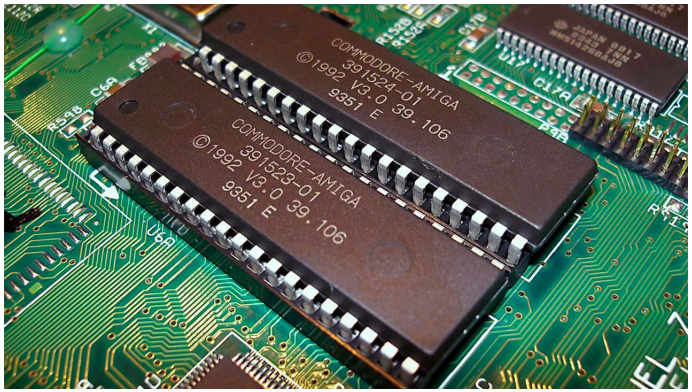


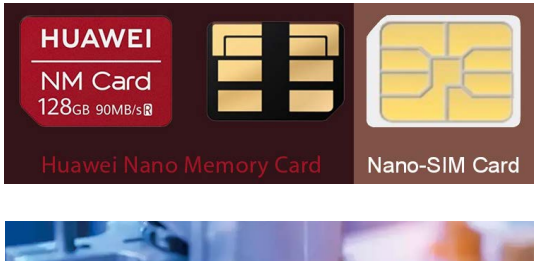


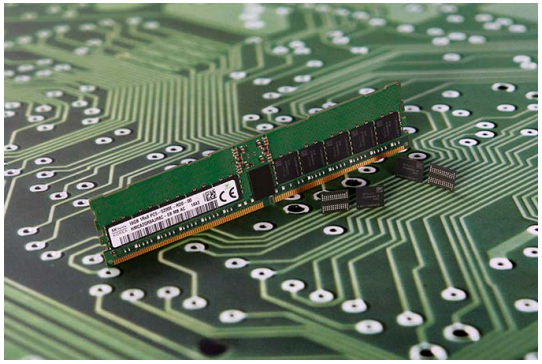

BACKBLAZE

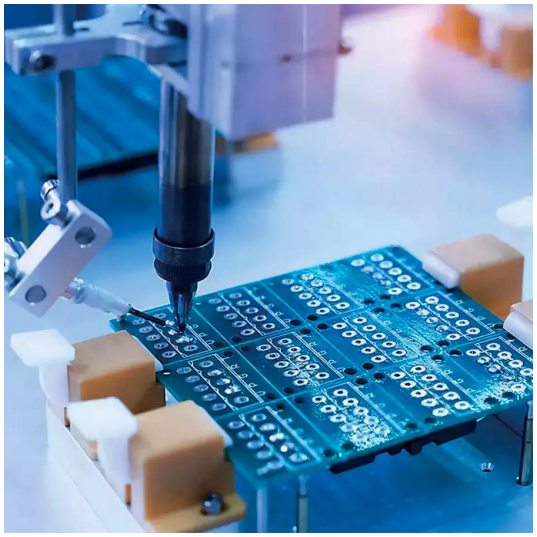



USB3.0-up to 5Gbps
USB 3.0
5 Gbps
USB 2.0
480 Mbps

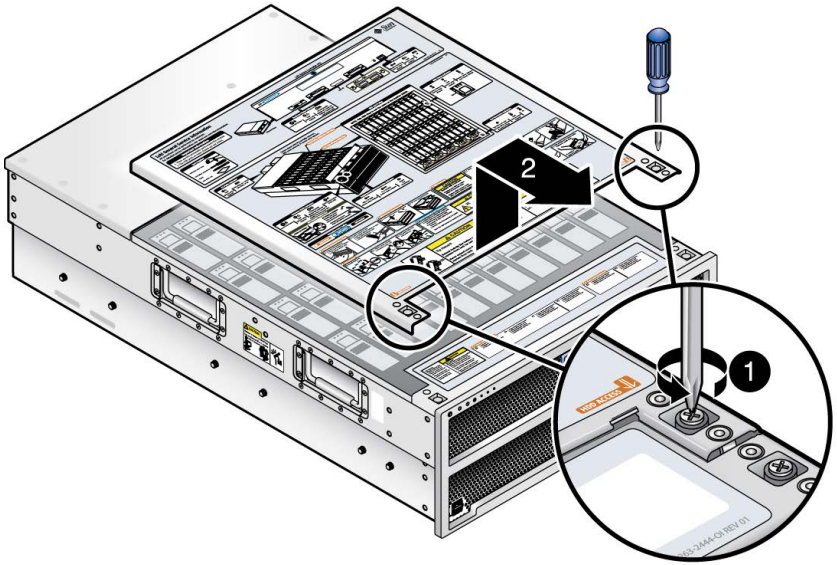

COMMODORE-AMIGA
391524-01
©1992 V3.0 39.106
9351 E
COMMODORE-AMIGA
391523-01
©1992 V3.0 39.106
9351 E


HUAWEI
NM Card
128GB 90MB/s
Huawei Nano Memory Card
Nano-SIM Card






AMIBIOS
AMERICAN
MEGATRENDS
P7992111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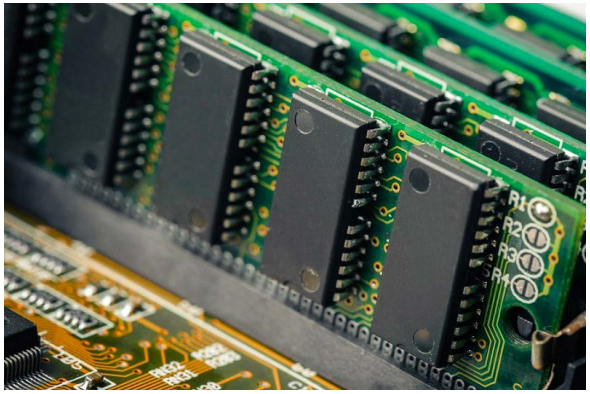
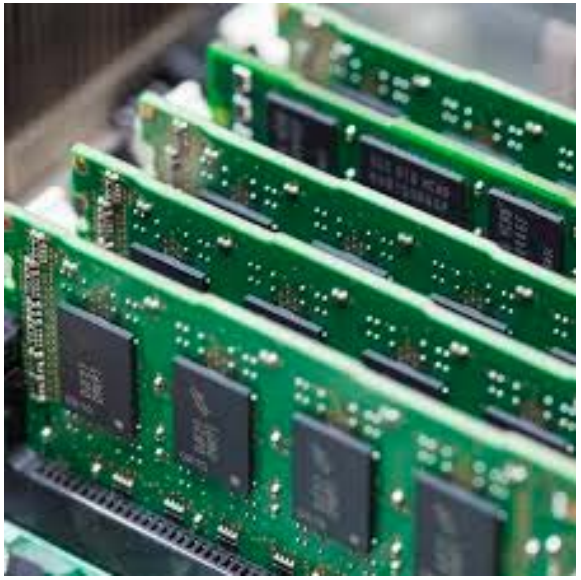
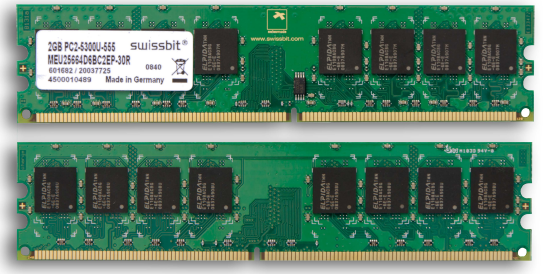




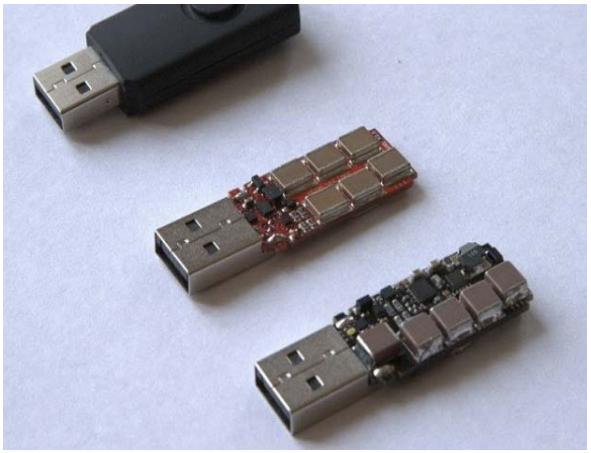

Hard Disk
RAM
ROM
CD/DVD
Floppy
Memory Card
Pen Drive
Tape

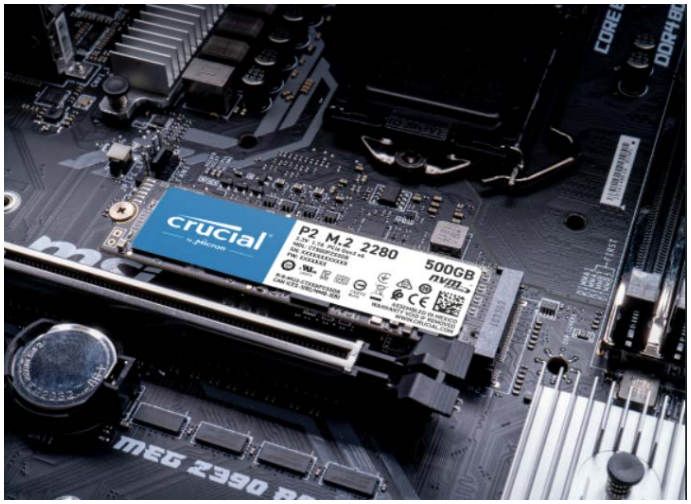



INDEX
A
TYPE I (NORMAL) POSITION
CHF90


M.2


Memory Stick PRO Duo
compatible
micro SD

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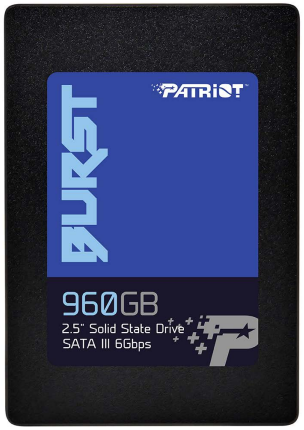
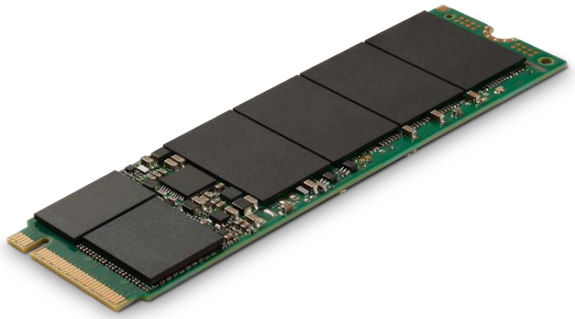
P2 M.2 2280
500GB
nvme

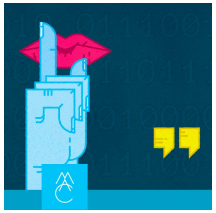

Crucial
P2 M.2 2280


PATRIOT
BURST
960GB
2.5" Solid State Drive
SATA III 6Gbps

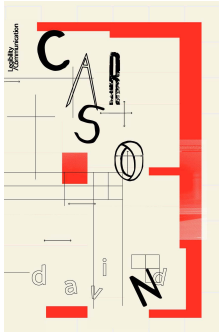


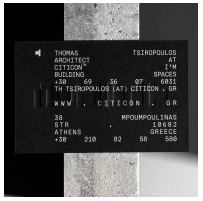

V-NAND SSD
970 EVO Plus
NVMe M.2
SAMSUNG
www.samsung.com/ssd
SAMSUNG ELECTRONICS CO., LTD.
2TB

logo inspiration

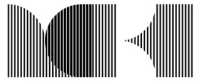



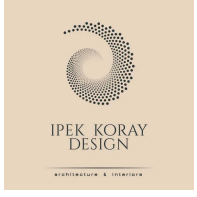


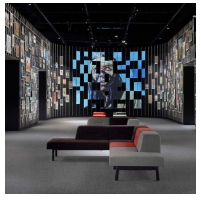


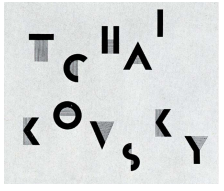







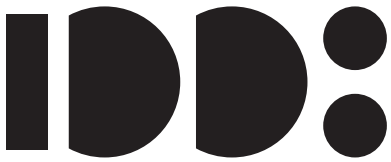


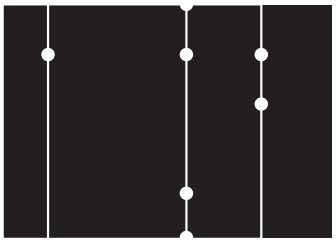


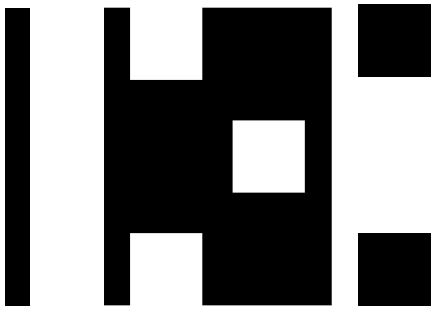
brand logo design concept

Technology is complex and built piece by piece. In my designs, I wanted to echo this complexity, while also conveying the change and evolution of technology. In particular, data storage transitioned from physical storages to online, cloud storages within a century. In my designs, I wanted to emphasize the development, while also expressing connections of internal physical storage device parts. At the same tiime, I did not want my logo designs to feel boring and obsolete so I tried to incorporate a twist of modernity and sleekness into the different design sketches.

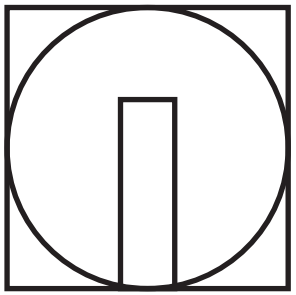
logo sketches for Institution of Digital Data Storage





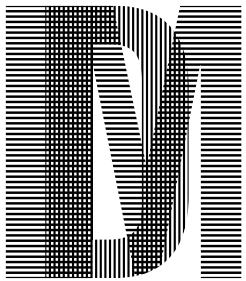


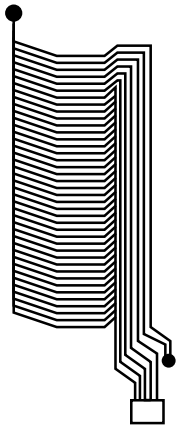
logo sketches for Institution of Digital Memory

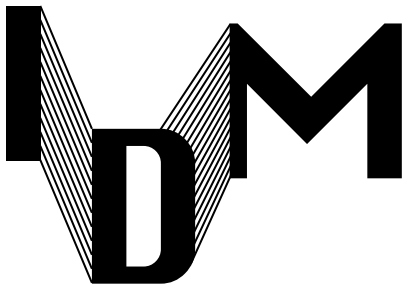


INSTITUTION
DM

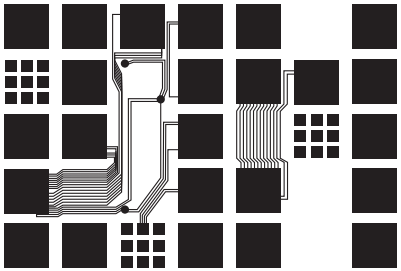
DIGITAL
MEMORY

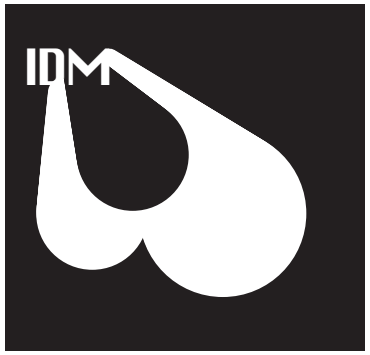




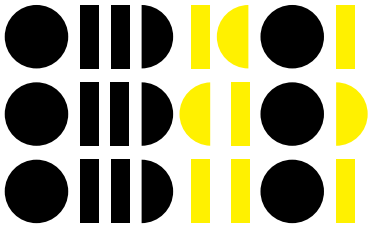



IDM




IDM


IDM



final logo