



RoboDidattica.net

Giulianova, li 14 settembre 2017 – prof. Francesco Benignetti

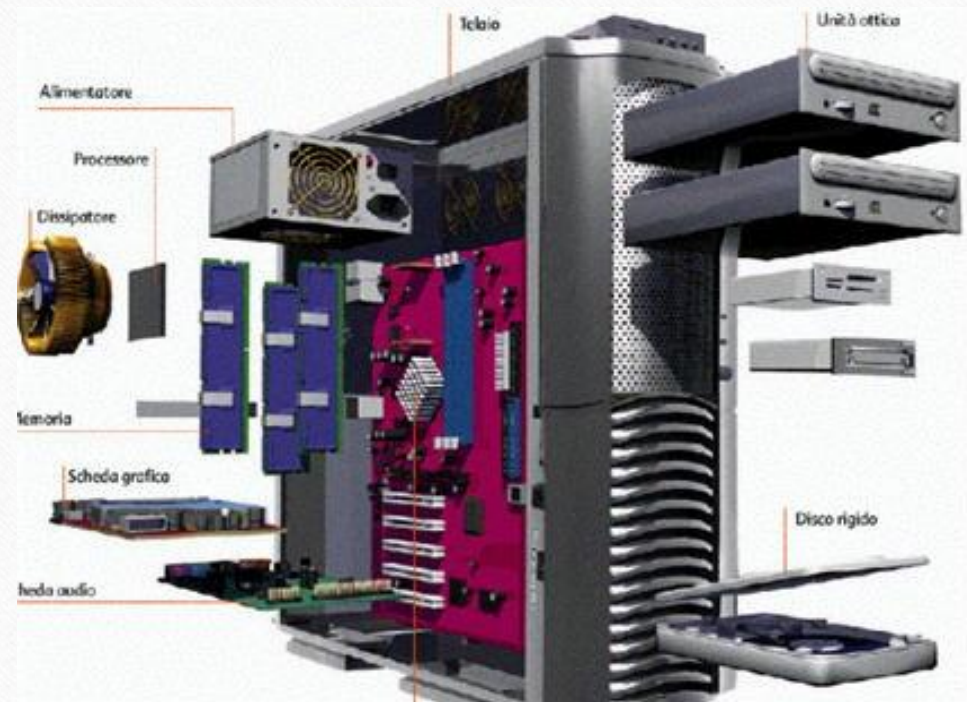
# CORSI F.S.E. - PERCORSO FORMATIVO ASSISTENTI TECNICI # AREA TEMATICA AT-2 #

Modulo didattico AT-2.1

STRUTTURA FISICA  
DI UN PERSONAL COMPUTER



# P.C. Desktop





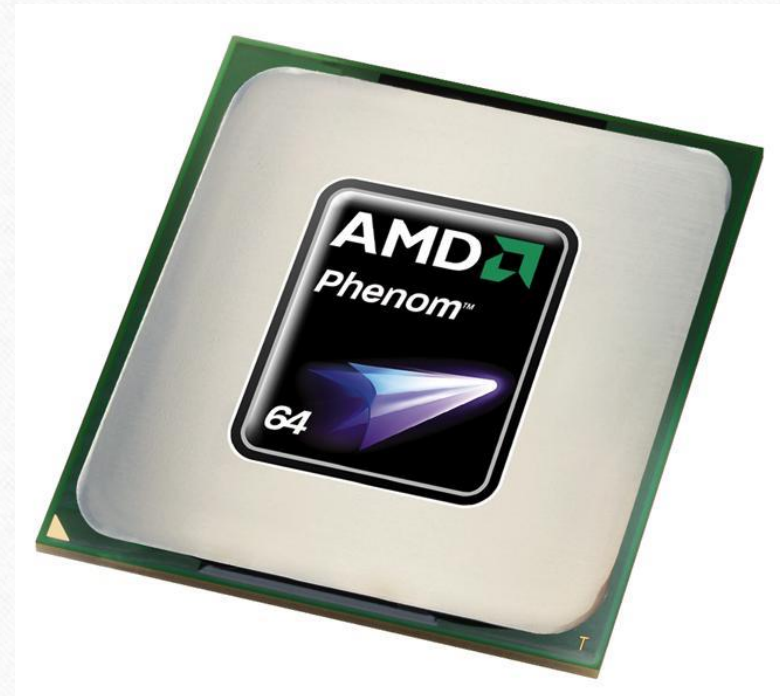
In generale i P.C. si distinguono (a livello hardware) in base all'architettura della scheda madre che ne costituisce la base del sistema ed in particolare con il tipo di microprocessore

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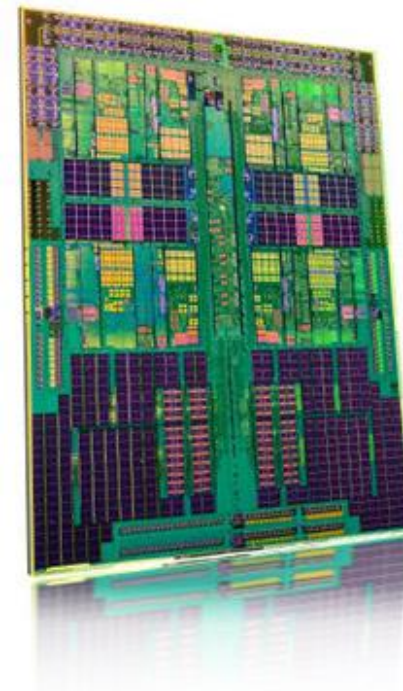
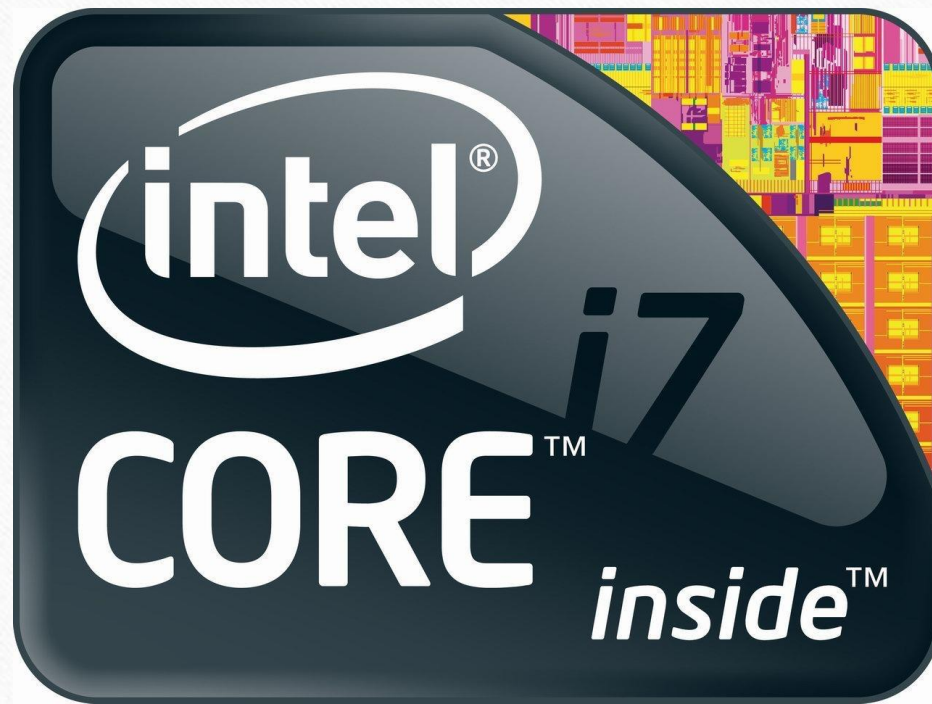
# PROCESSORI INTEL E AMD

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# ESEMPIO DI ETICHETTE POSTE SUL CASE DI UN P.C.

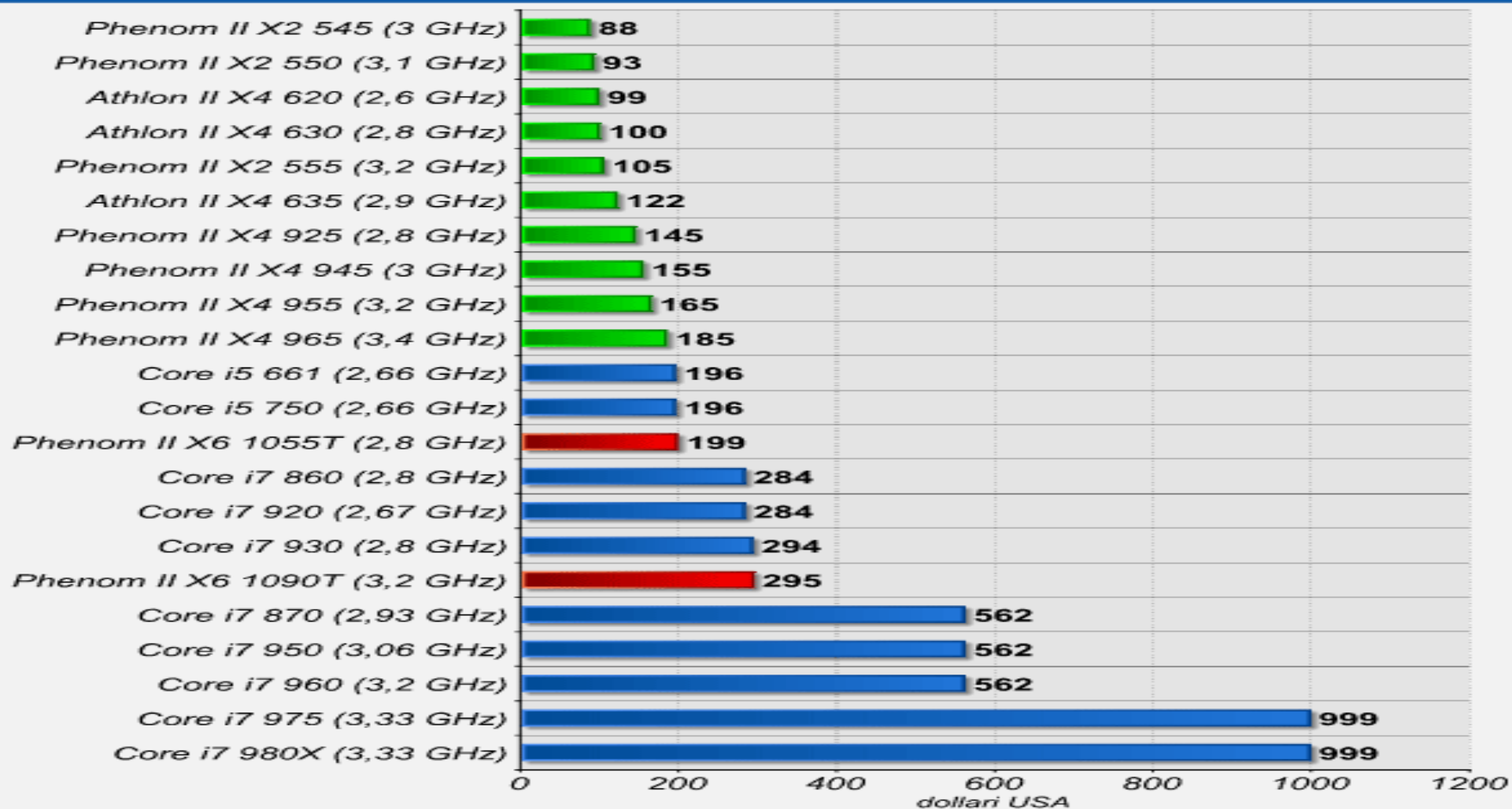


## I PROCESSORI PIU' VELOCI

1. Intel Core i7 975 Extreme Edition	(3,33GHz)	376%
2. Intel Core i7 950	(3,06 GHz)	336%
3. Intel Core i7 920	(2,66 GHz)	303%
4. Intel Core i5 750	(2,66 GHz)	297%
5. Intel Core i5 661	(3,33 GHz)	281%
6. AMD Phenom II X4 965	(3,40 GHz)	272%
7. Intel Core 2 Quad Q95550	(2,83 GHz)	267%
8. AMD Phenom II X4 955	(3,20 GHz)	264%
9. AMD Phenom II X4 940	(3,00 GHz)	251%
10. Intel Core i3 530	(2,93 GHz)	243%
11. Intel Core 2 Duo E8500	(3,16 GHz)	237%
12. Intel Core 2 Quad Q6600	(2,40 GHz)	221%
13. AMD Phenom II X3 720	(2,80 GHz)	220%
14. AMD Phenom II X4 620	(2,60 GHz)	214%
15. AMD Phenom II X3 435	(2,90 GHz)	212%
16. AMD Phenom X4 Quad Core 9650	(2,30 GHz)	196%
17. Intel Core 2 Duo E7200	(2,53 GHz)	193%
18. AMD Athlon X2 Dual Core 6400+	(3,20 GHz)	185%
19. Intel Core 2 Duo E6300	(1,86 GHz)	148%
20. Intel Pentium 4 HT 560	(3,60 GHz)	100%



## Moneybench: prezzi ufficiali dei processori come praticati dai produttori e resi pubblici nelle pricelist



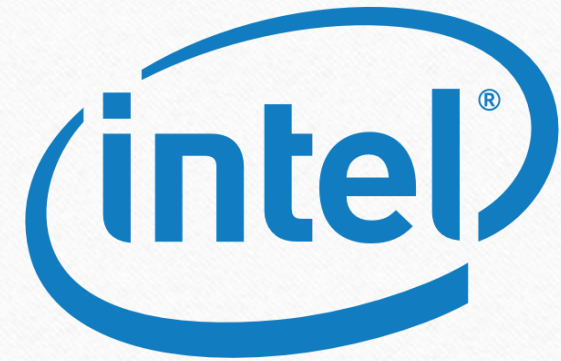


# PARTI COSTITUENTI UN PC DESKTOP





MOTHER BOARD







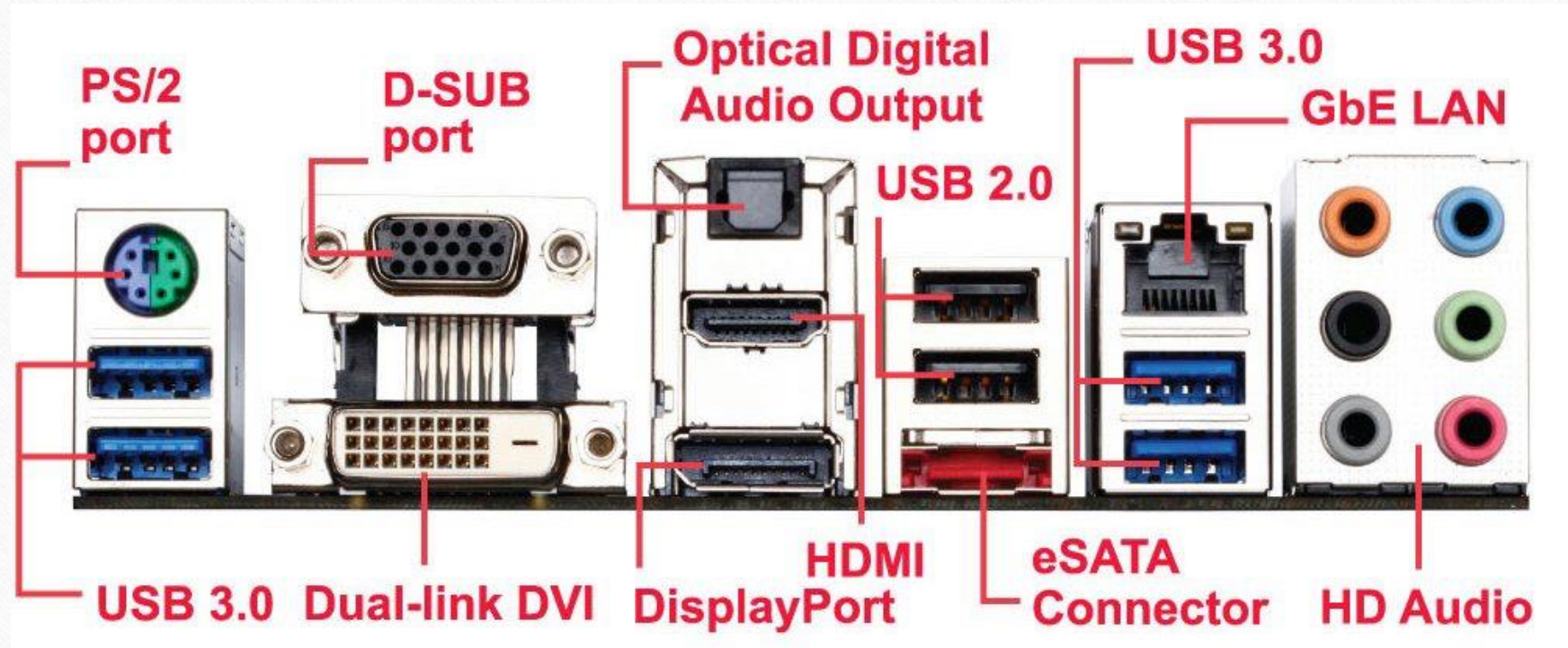
MOTHER BOARD



**AMD**

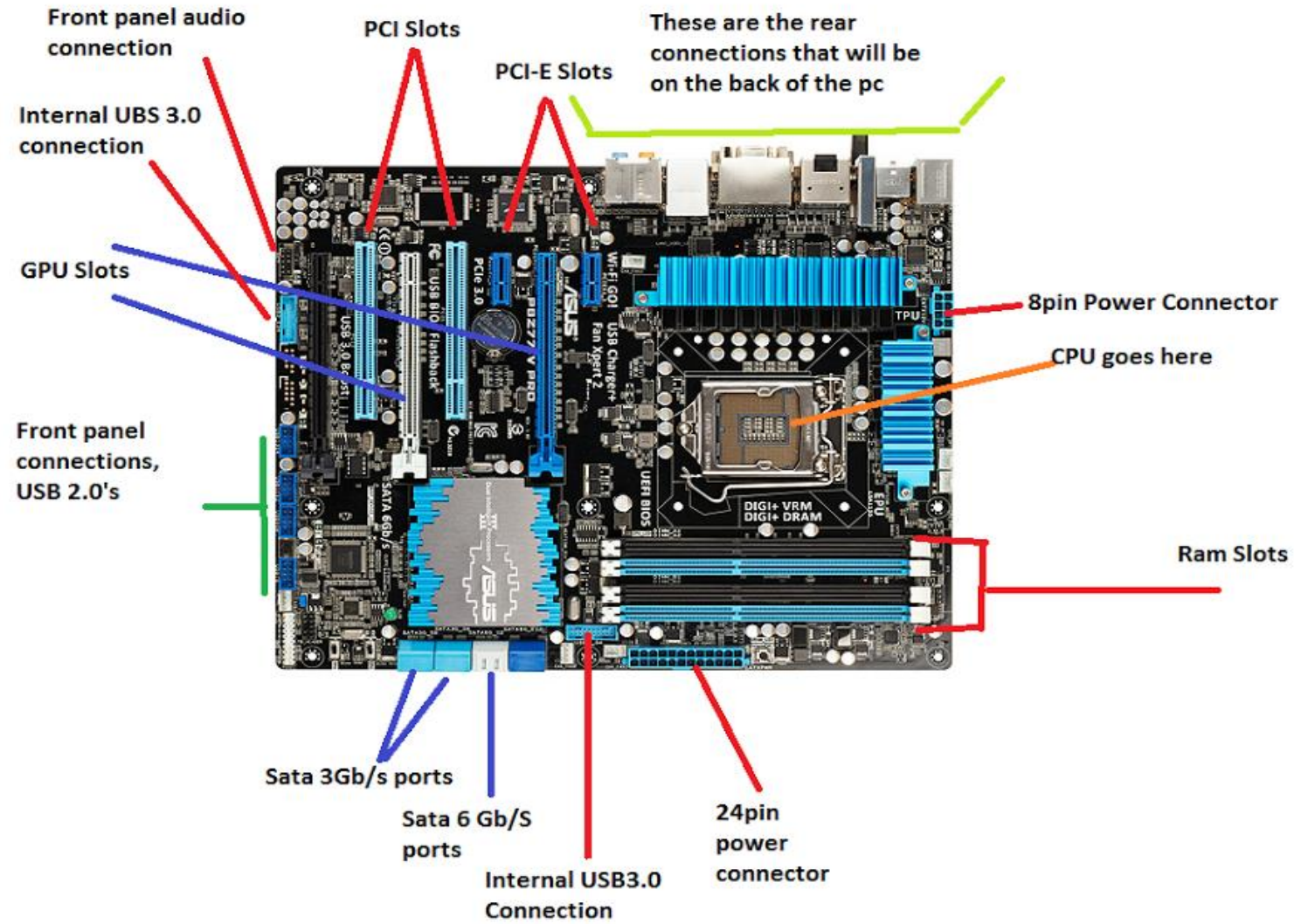
MOTHER BOARD CON  
SCHEDE GRAFICA  
INTEGRATA  
*“LA MEMORIA CONDIVISA”*





CONNESSIONI ESTERNE MOTHER BOARD [SCHEDA MADRE]





CONNESSIONI  
INTERNE

MOTHER  
BOARD



```
Aptio Setup Utility - Copyright (C) 2010 American Megatrends, Inc.
Main  Advanced  Security  Server Management  Boot Options  Boot Manager
▶ Processor Configuration          View/Configure processor
▶ Memory Configuration            information and settings.
▶ Mass Storage Controller Configuration
▶ Serial Port Configuration
▶ USB Configuration
▶ PCI Configuration
▶ System Acoustics and Performance Configuration

++      Select Screen
↑↓      Select Item
+/-     Change Value
Enter   Select Field
F1      General Help
F9      Optimized Defaults
F10     Save and Exit
ESC     Exit

Version 1.23.1114. Copyright (C) 2010 American Megatrends, Inc.
```

Che cos'è il BIOS del P.C. ?



ESEMPIO DI BIOS DEL PC

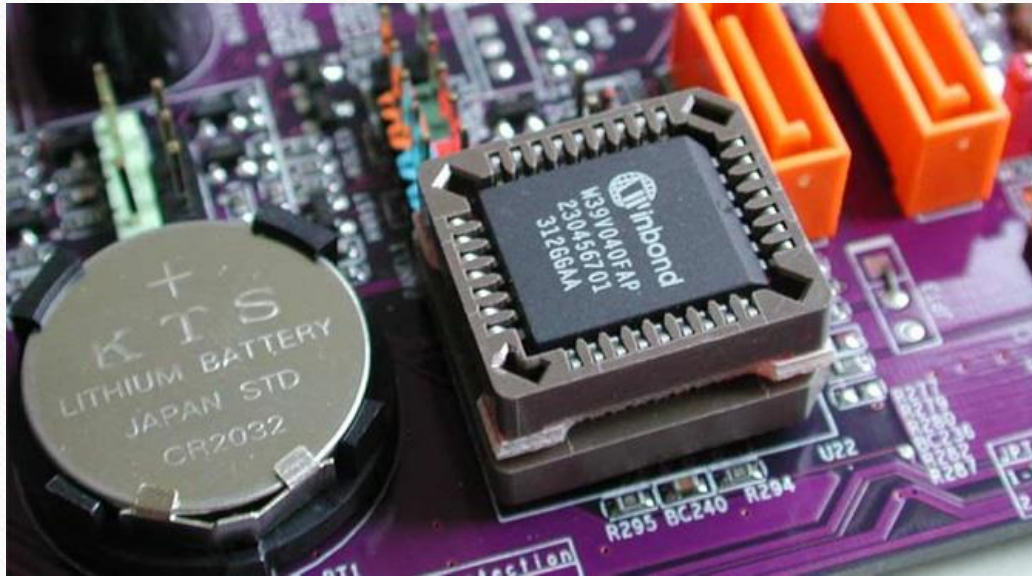
**msi**™  
mainboard

```
Initializing USB Controllers .. Done.  
16384MB OK  
USB Device(s): 1 Mouse, 1 Storage Device  
Auto-Detecting IDE Primary Master...ATAPI CDROM  
Auto-Detecting SATA5...Hard Disk  
Auto-Detecting SATA3...Hard Disk  
IDE Primary Master : PIONEER DVD-RW DVR-112D 1.15  
Ultra DMA Mode-4  
SATA5 : Hitachi HDS722020ALA330 JKA0A20N  
Ultra DMA Mode-6, S.M.A.R.T. Capable and Status  
SATA3 : Hitachi HDS722020ALA330 JKA0A20N  
Ultra DMA Mode-6, S.M.A.R.T. Capable and Status  
Auto-detecting USB Mass Storage Devices ..  
Device #01 : LEXAR JD LIGHTNING II  
01 USB mass storage devices found and configured.
```

```
CMOS Checksum Bad  
Press F1 to Run SETUP  
Press F2 to load default values and continue
```

UNO  
DEI  
GUAISTI  
PIÙ  
COMUNI

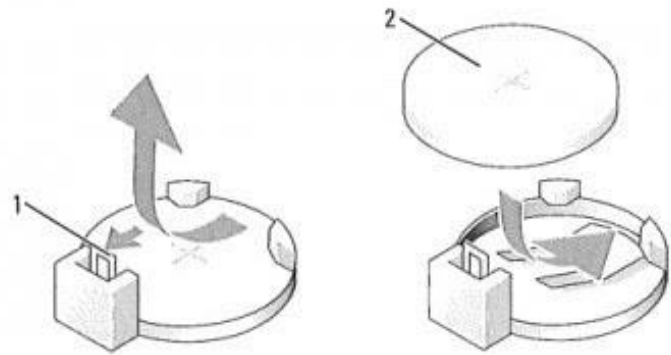




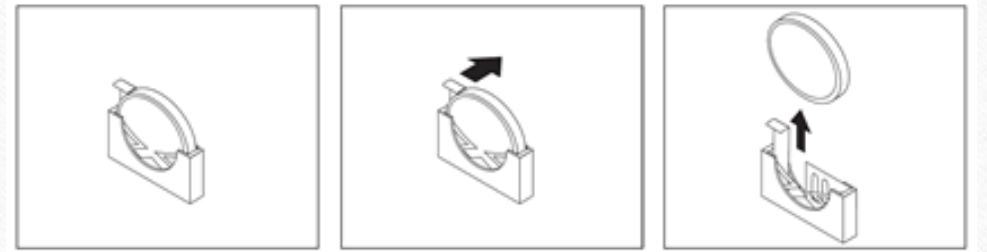
**B.I.O.S.  
CLOCK & CMOS Battery**

**PER RESETTARE IL B.I.O.S.  
CORTOCIRCUITARE ASSIEME  
I DUE PIN CLR\_CMOS  
PER ALMENO 20 SECONDI**





1 battery release lever 2 battery (positive side)

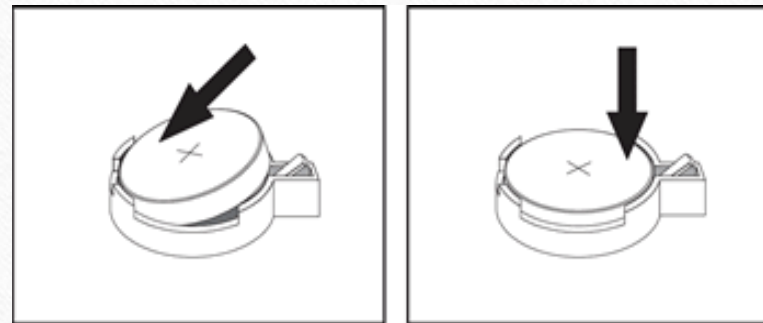


## SOSTITUZIONE BATTERIA C-MOS

CMOS Battery



ComputerHope.com

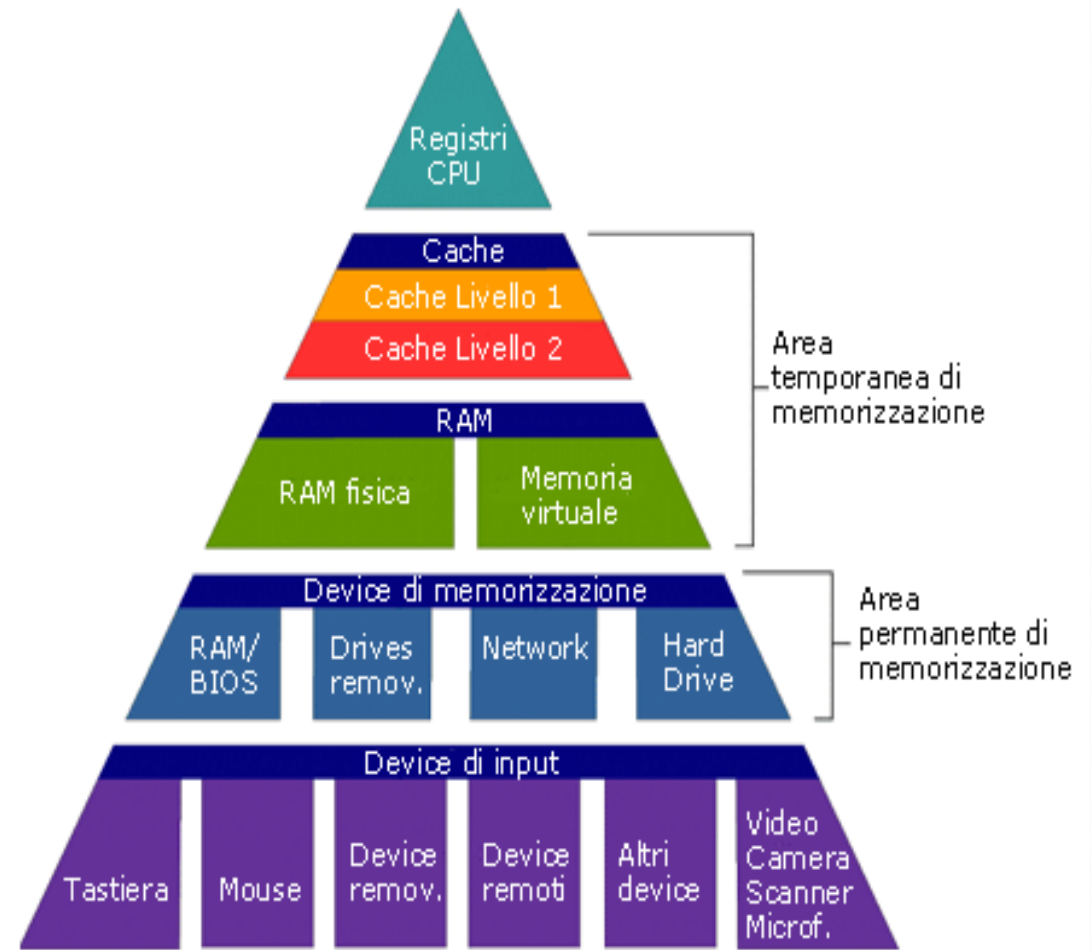




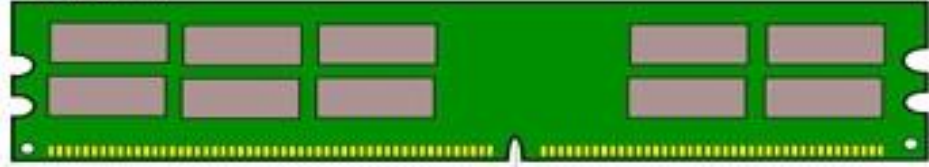


## LA MEMORIA DEL P.C.

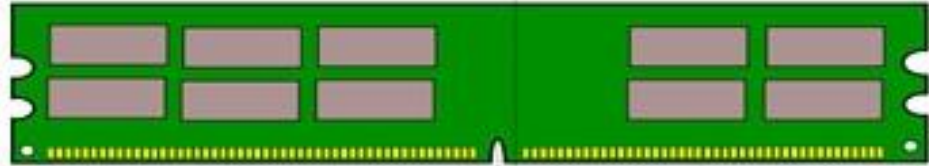
RAM = RANDOM ACCES MEMORY



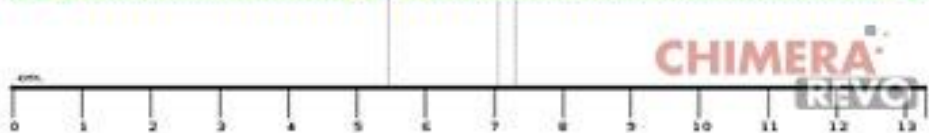
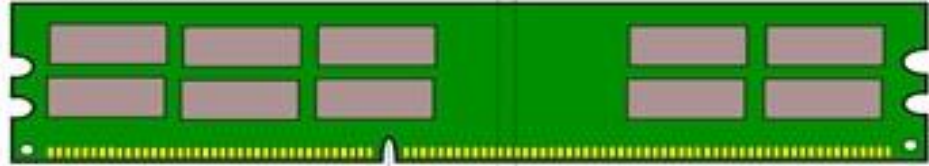
DDR



DDR 2



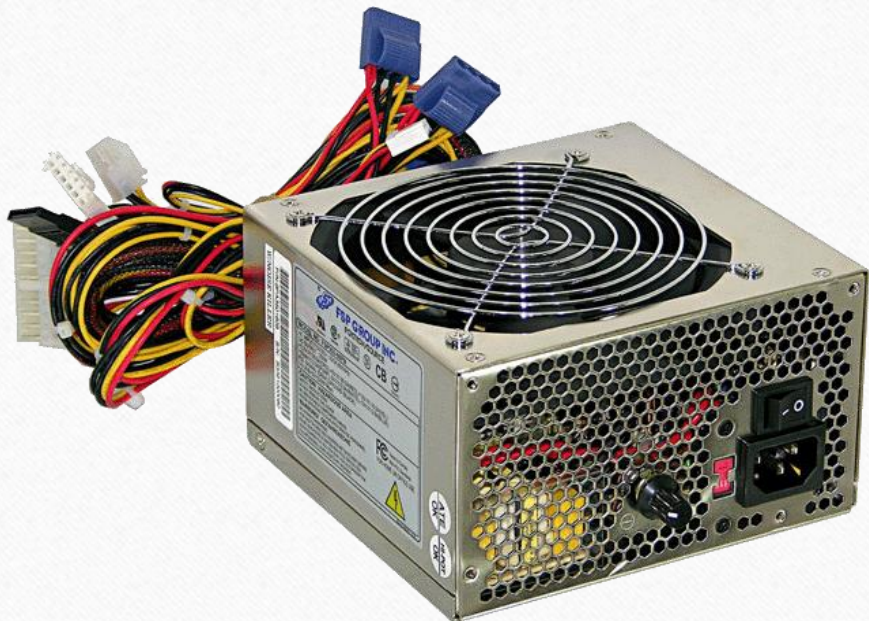
DDR 3



## INDIVIDUAZIONE DEI PRINCIPALI TIPI DI BANCHI DI MEMORIA RAM

**UN BEEP INTERMITTENTE PROVENIENTE  
DALL'INTERNO DEL PC POTREBBE ESSERE  
IL SINTOMO DI UN BANCO RAM DIFETTOSO**





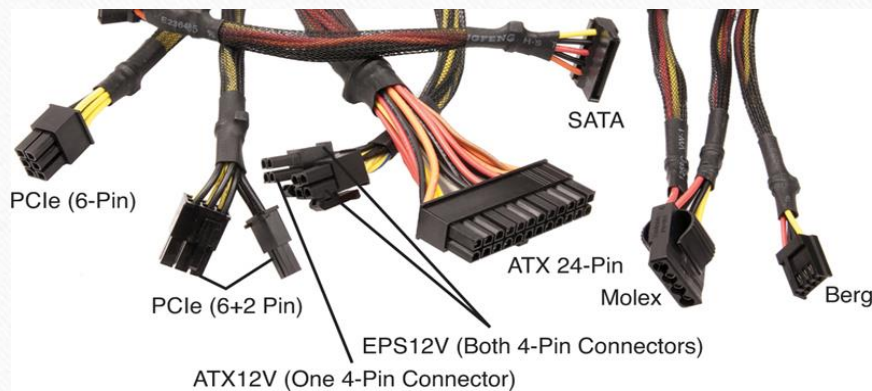
Product Number: **PG-1000**

Model Number: HP-1000-G14C-GOLD

AC INPUT: 100-240V 13A / FREQUENCY: 50-60 Hz / Max. DC Output 1000W

DC OUTPUT	+5V	+3.3V	+12V1	+12V2	+12V2	+12V2	-12V	+5Vsb
Max Output Current	25A	25A	30A	30A	30A	30A	0.8A	6A
Max Output Power	180W		1000W			9.6W		30W
Continuous Power	1000W							

### Protection



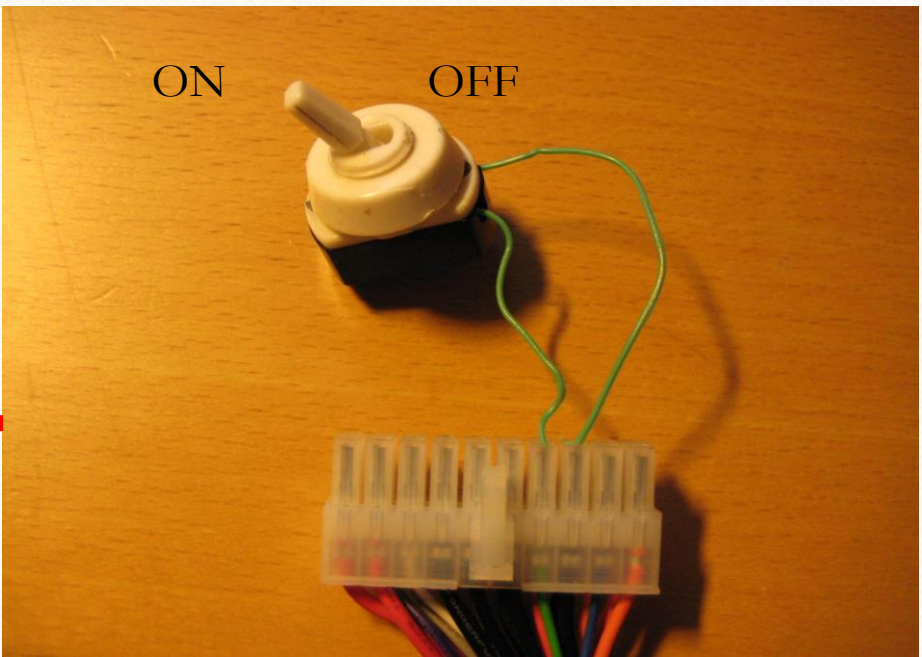
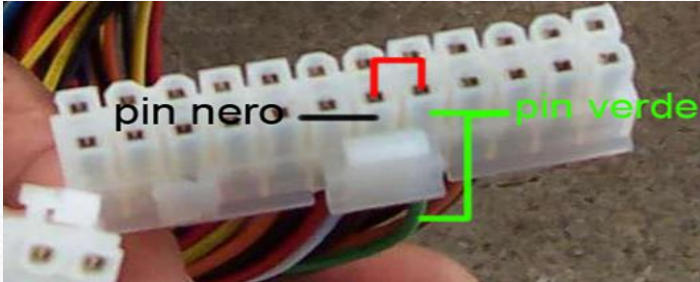
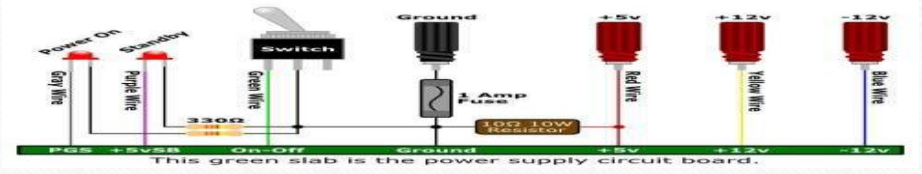
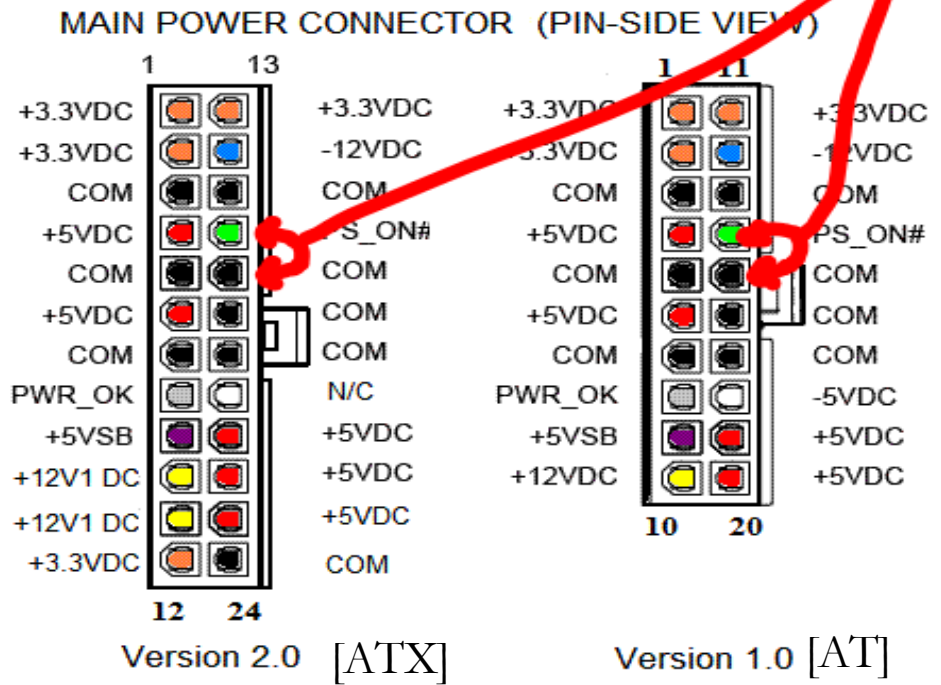
## ATX POWER SUPPLY & CONNECTORS

## ALIMENTATORE E CONNESSIONI





# COME ACCENDERE MANUALMENTE UN ALIMENTATORE PER PC



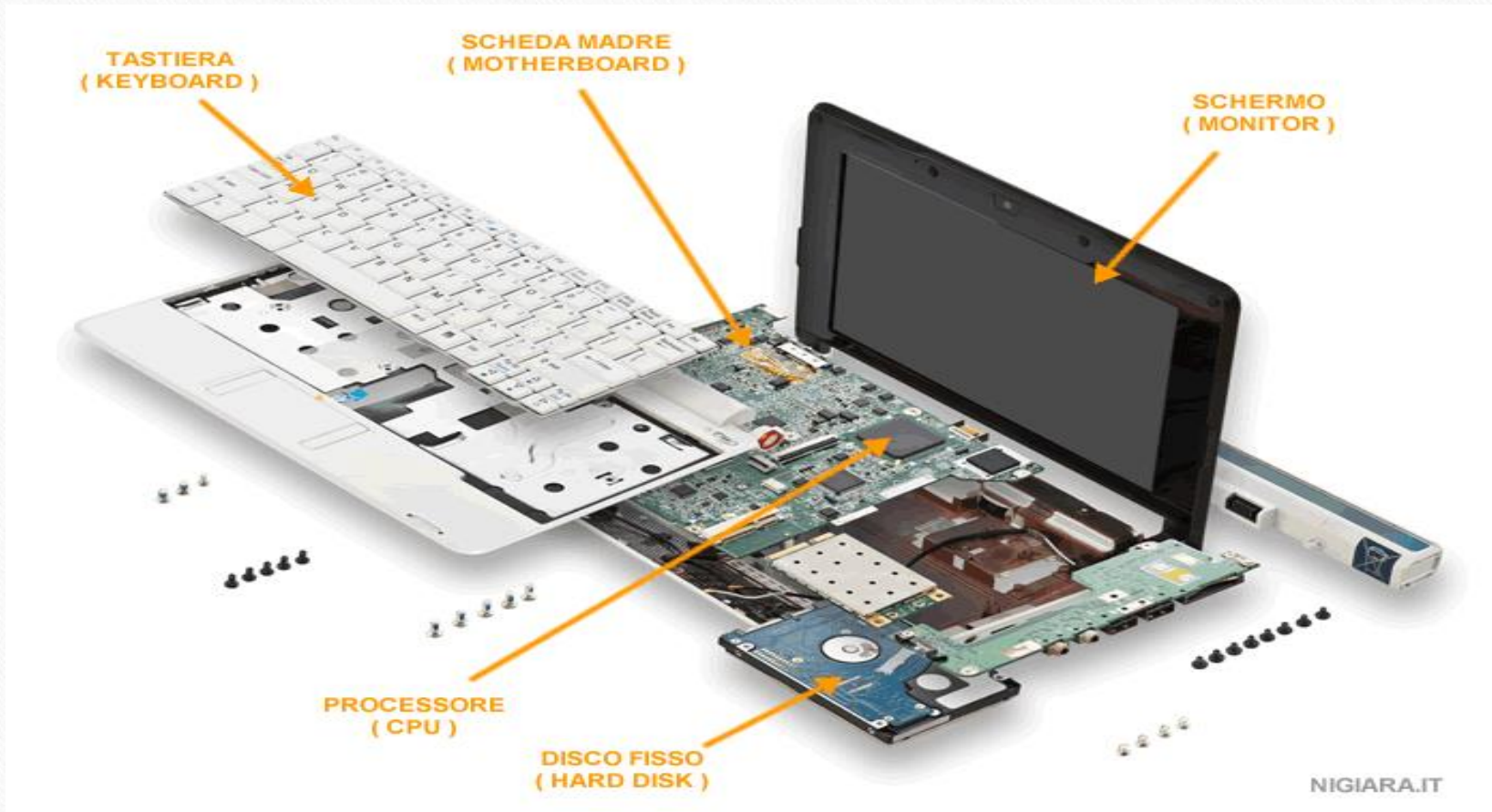




IL GRUPPO DI CONTINUITA' PERMETTE DI PROTEGGERE I PC (E LE APPARECCHIATURE ELETTRONICHE IN GENERE) DA POSSIBILI VARIAMENTI REPENTINI DI TENSIONE DELLA RETE ELETTRICA.

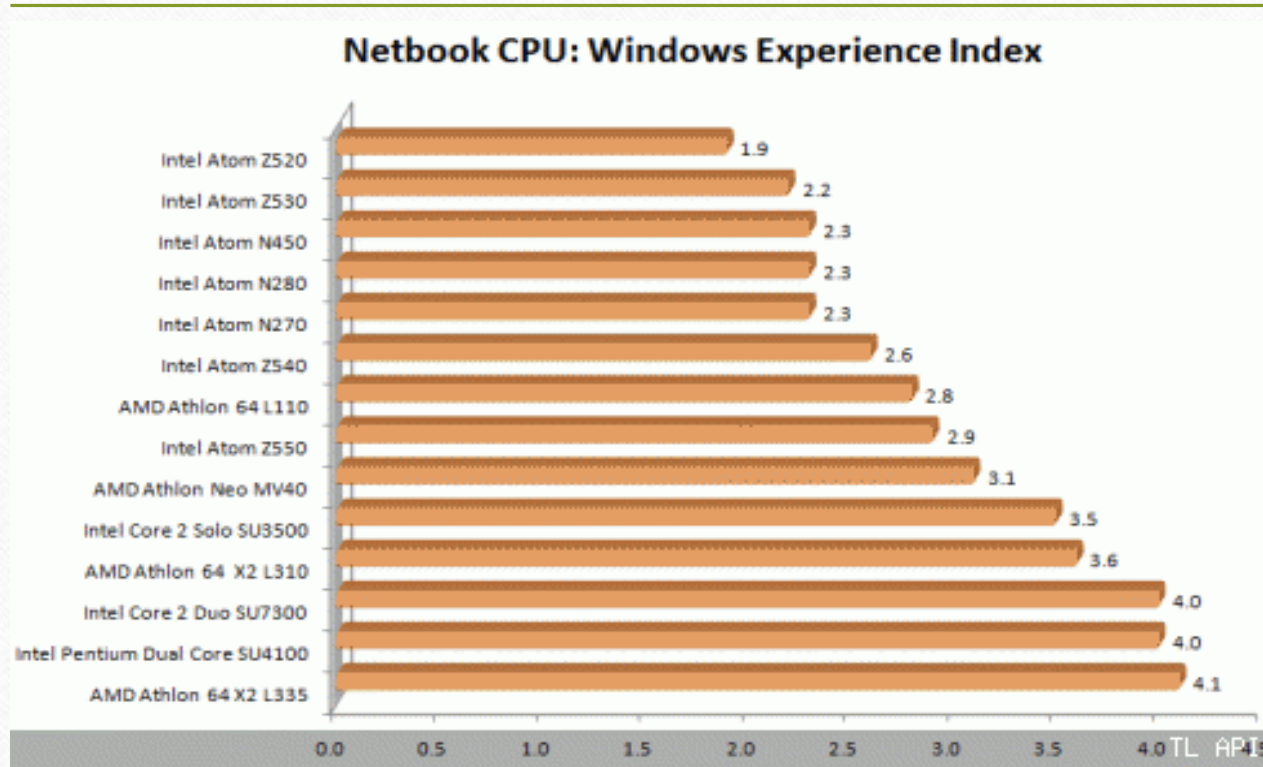
NE E' VIVAMENTE CONSIGLIATA L'INSTALLAZIONE PER PROTEGGERE I PC DEGLI UFFICI AMMINISTRATIVI E/O DOVE VI E' LA NECESSITA' DI PROTEGGERE APPARECCHIATURE CHE RIVESTONO UNA SIGNIFICATIVA IMPORTANZA PER LA ELABORAZIONE DEI DATI.

# P.C. NETBOOK & NOTEBOOK





# PROCESSORI PER NETBOOK



I NETBOOK PIU'  
PERFORMANTI  
MONTANO  
PROCESSORI  
PROCESSORI AMD



## SSD VS HDD



- FASTER PERFORMANCE
- NO VIBRATIONS OR NOISE
- MORE ENERGY EFFICIENT

- CHEAPER PER GB
- AVAILABLE IN LARGE VERSIONS

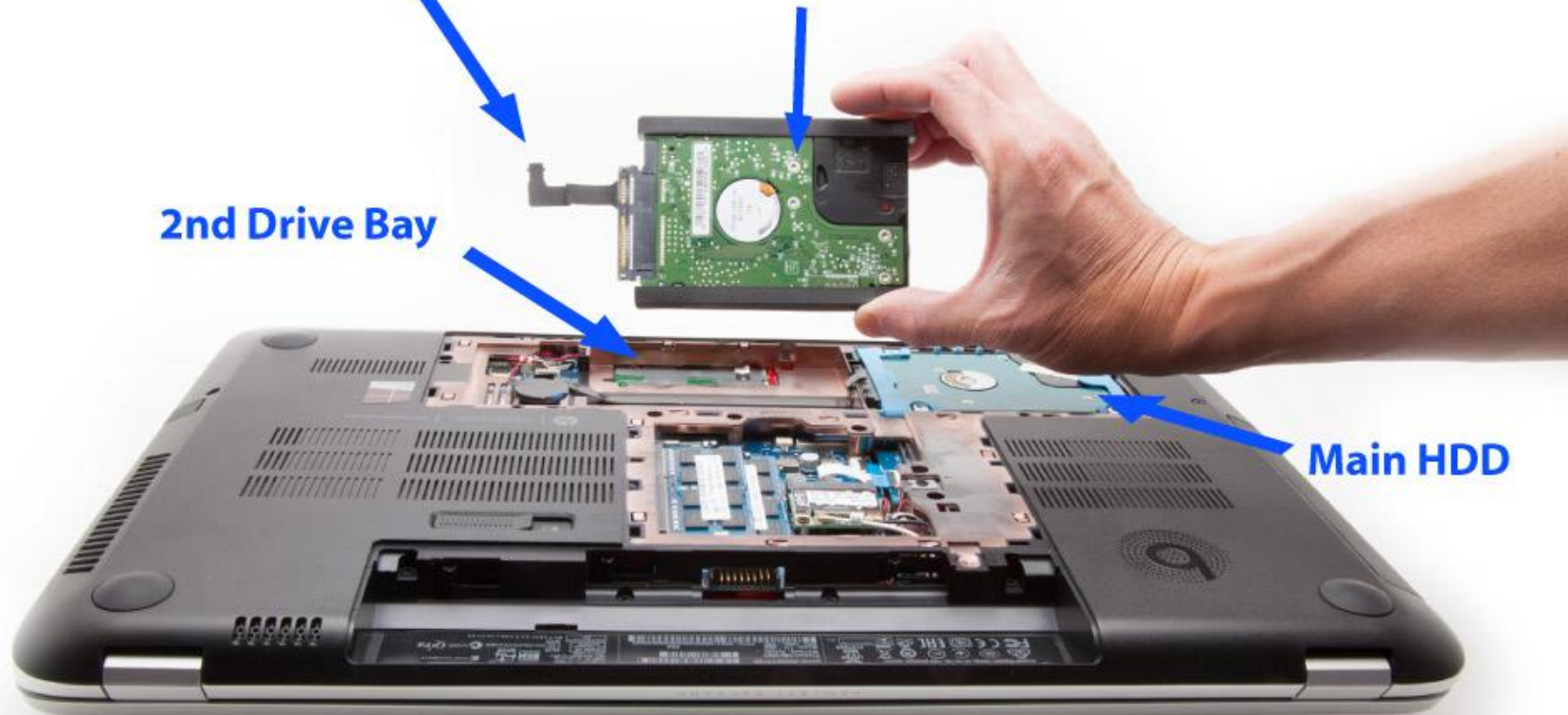


**SATA Cable / Connector**

**2nd HDD or SSD**

**2nd Drive Bay**

**Main HDD**



**newmodeus™**



# I TABLET: MANUTENZIONE E POSSIBILITÀ DI TRASMETTERE I CONTENUTI SU LED TV E/O SISTEMI DI VIDEOPROIEZIONE.







Chrome Cast è un dispositivo  
prodotto da



Ci permette di trasmettere  
attraverso la connessione Wi-Fi  
e la App HOME il contenuto di  
Tablet e Smartphone  
Android & IOS su  
schermo TV o Videoproiettore





Tablet con proiettore incorporato Yoga 3 Tablet di LENOVO



# CLOUD COMPUTING



# SERVIZI PER CLOUD COMPUTING





*Grazie per l'attenzione*

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*[www.francescobenignetti.it](http://www.francescobenignetti.it)*