

List of Acronyms

1D	one (1) d imensional
2D	two (2) d imensional
3D	three (3) d imensional
A/D	a nalog-to- d igital
ADC	a nalog-to- d igital c onverter
AFM	a tomic f orce m icroscope or m icroscopy
AGC	a utomatic g ain c ontrol
AlTiC	a lumina – t itanium c arbide (a class of ceramics used in heads)
AMR	a nisotropic m agnetor e sistive (or r esistance)
aramid	a romatic poly a mide
ASIC	a pplication s pecific i ntegrated c ircuit
ATA	a dvanced t echnology a ttachment
BAR	b it a spect r atio
BaFe	b arium f errite
BBSNR	b roadband s ignal-to- n oise r atio
BPI	b its p er i nch
C1	error correcting code type C1 (see also ECC1)
C2	error correcting code type C2 (see also ECC2)
CAGR	c ompound a nnual g rowth r ate
CD	c ompact d isc
CFR	C ode of F ederal R egulations
CIP	c urrent- i n-the- p lane
CPP	c urrent- p erpendicular-to-the- p lane
CT	c omputed axial t omography
CZT	c obalt- z irconium- t antalum (a class of magnetic alloys used in heads)
d2d2t	d isk to d isk to t ape
DMA	d ynamic m echanical a nalysis
DR	d isaster r ecovery
DUV	d eep u ltraviolet
DVD	D igital V ersatile D isc or D igital V ideo D isk
E2PR4	e xtended- e xtended p artial- r esponse – class- 4
EB	e xabyte (10 ¹⁸ bytes or 2 ⁶⁰ bytes)
ECC	e rror c orrection c ode
ECC1	e rror c orrecting c ode type C1 (see also C1)
ECC2	e rror c orrecting c ode type C2 (see also C2)
EHR	e lectronic h ealthcare r ecord
EPR4	e xtended p artial- r esponse – class- 4
EPRML	e xtended p artial- r esponse m aximum- l ikelihood
EQ	e qualization
ESD	e lectro s tatic d ischarge
ESG	E nterprise S trategy G roup
FC	f ibre c hannel
FCI	f lux c hanges per i nch
FIR	f inite i mpulse r esponse
FMR	f erromagnetic r esonance
FPGA	f ield p rogrammable g ate a rray
Gbit/in ²	g igabit per square i nch (10 ⁹ bits per square inch)
GB	g igabyte (10 ⁹ bytes or 2 ³⁰ bytes)

GMR	g iant m agnetoresistive (or r esistance)
HCA	h ead c leaning a gents
HDD	h ard d isk d rive
HIMSS	H ealthcare I nformation and M anagement S ystems S ociety
HIPAA	H ealth I nurance P ortability and A ccountability A ct
HMS	h ead- m edia s pacing
INSIC	I nformation S torage I ndustry C onsortium
I/O	input/ o utput
IDC	I nternational D ata C orporation
ISV	i ntantaneous s peed v ariation
IT	i nformation t echnology
KBPI	k ilobits p er i nch
KFCI	k iloflux c hanges per i nch
KTPI	k ilo t racks per i nch
kWh	k ilowatt- h our
LDPC	l ow d ensity p arity c heck
LMS	l east m ean s quare
LPOS	l ongitudinal p osition
LTFS	L inear T ape F ile S ystem
LTM	l ateral t ape m otion
LTMSim	LTM Simulator (INSIC software package)
LTO	L inear T ape- O pen
LTO-n	L inear T ape- O pen format generation n (where n is a single-digit integer)
M&E	m edia & e ntertainment (industry)
MAID	m assive a rray(s) of i dle d isks
MB	m egabyte (10 ⁶ bytes or 2 ²⁰ bytes)
MB/sec	m egabytes per s econd
ME	m etal e vaporated
MLSD	m aximum- l ikelihood s equence d etection
MP	m etal p articulate or m etal p article
MR	m agnetoresistive (or r esistance)
MRI	m agnetic r esonance i maging
MTTF	m ean t ime t o f ailure
NERSC	N ational E nergy R esearch S cientific C omputing Center
NPML	n oise p redictive m aximum l ikelihood
NRZ	n on- r eturn- t o- z ero
OEM	O riginal E quipment M anufacturer
OSHA	O ccupational S afety and H ealth A dministration
PB	p etabyte (10 ¹⁵ bytes or 2 ⁵⁰ bytes)
PEN	p olyethylene n aphthalate
PES	p osition e rror s ignal
PET	p olyethylene t erephthalate, also p ositron e mission t omography
PLL	p hase l ocked l oop
ppm	p arts p er m illion
PR	p artial- r esponse
PR4	p artial- r esponse – class- 4
PRML	p artial- r esponse m aximum- l ikelihood
PTR	p ole t ip r ecession
PW	p ulse w idth
PW50	p ulse w idth at 50 % amplitude

PZT	lead (Pb) zirconate titanate (piezoelectric ceramic material)
R _a	<u>r</u> oughness (<u>a</u> verage)
RA	<u>r</u> esistance <u>a</u> rea product (a figure of merit for tunnel junctions)
RAID	<u>r</u> edundant <u>a</u> rray(s) of <u>i</u> nexpensive <u>d</u> isks
RC	<u>r</u> everse <u>c</u> oncatenation
RDX	<u>r</u> emovable <u>d</u> isk technology
RH	<u>r</u> elative <u>h</u> umidity
RLL	<u>r</u> un- <u>l</u> ength- <u>l</u> imited
R _q	<u>r</u> oughness (root-mean- <u>s</u> quare of deviation from the mean plane)
RS	<u>R</u> eed- <u>S</u> olomon (a class of error correction codes)
RSS	<u>r</u> oot <u>s</u> um <u>s</u> quare or <u>r</u> oot <u>s</u> um of <u>s</u> quares
SAS	<u>s</u> erial <u>a</u> ttached <u>S</u> CSI (<u>s</u> erial <u>a</u> ttached <u>s</u> mall computer system interface)
SATA	<u>s</u> erial <u>A</u> TA (<u>s</u> erial <u>a</u> dvanced <u>t</u> echnology <u>a</u> ttachment)
SCSI	<u>s</u> mall <u>c</u> omputer <u>s</u> ystem <u>i</u> nterface
SNR	<u>s</u> ignal-to- <u>n</u> oise <u>r</u> atio
SUL	<u>s</u> oft <u>u</u> nder <u>l</u> ayer
Tbit/in ²	<u>t</u> er <u>a</u> bit per square <u>i</u> nch (10 ¹² bits per square inch)
TB	<u>t</u> er <u>a</u> byte (10 ¹² bytes or 2 ⁴⁰ bytes)
TBS	<u>t</u> ime <u>b</u> ased <u>s</u> ervo
TCO	<u>t</u> otal <u>c</u> ost of <u>o</u> wnership
TDS	<u>t</u> otal <u>d</u> imensional <u>s</u> tability
TMR	<u>t</u> unneling <u>m</u> agnetor <u>r</u> esistive (or <u>m</u> agnetor <u>r</u> esistance)
TPI	<u>t</u> racks <u>p</u> er <u>i</u> nch
UBD	<u>u</u> ser <u>b</u> it <u>d</u> ensity
VOD	<u>v</u> ideo on <u>d</u> emand
VSD	<u>v</u> olumetric <u>s</u> torage <u>d</u> ensity
VSM	<u>v</u> ibrating- <u>s</u> ample <u>m</u> agnetometer
WEQ	<u>w</u> rite <u>e</u> qualization
ZB	<u>z</u> ettabyte (10 ²¹ bytes or 2 ⁷⁰ bytes)

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