## ATA COMMAND TABLE (in Alphabetic Order)

ATA Command	Instruction			OP
ADD LAB(S) TO NV CACHE PINNED SET	AddPinSet			B6h
CFA ERASE SECTORS	CfaEraseSec	CFES		COh
CFA FORMAT SECTORS	CfafmtTrk	CFFT		50h
CFA KEY MANAGEMENT CHANGE KEY	Grannerik	0111		0011
MANAGEMENT VALUE	CfaKeyChange	CFKC		B9h
CFA KEY MANAGEMENT READ KEYING MATERIAL	CfaRdKey	CFRK		B9h
CFA KEY MANAGEMENT STRUCTURE READ	CfaStRead	CFSR		B9h
CFA REQUEST EXTENDED ERROR	CfaReqErr	CFRE		03h
CFA TRANSLATE SECTOR	CfaTransSec	CFTS		87h
CFA WEAR LEVEL	CfaWearLevel	CFWL		F5h
CFA WRITE MULTIPLE WITHOUT ERASE	CfaWrMul	CFWM		CDh
CFA WRITE MOETH LE WITHOUT ERASE	CfaWrNdr	CFWS		38h
CFA WRITE VERIFY	CfaWrVerify	CFWV		3Ch
CHECK MEDIA CARD TYPE	ChkMedType	CHMT		D1h
CHECK POWER MODE	ChkPwrMode	CKPW	CHPW	
		CKPVV	CHPVV	E5h
CHS2LBA	CHS2LBA	OFOT		F41
CONFIGURE STREAM	CfgStr	CFST		51h
DATA SET MANAGEMENT	ATA_DSM	DSM	5.051	06h
DEVICE CONFIGURATION FREEZE LOCK	DevCfgFrzLock	DCOF	DCFL	B1h
DEVICE CONFIGURATION IDENTIFY	DevCgfIdfy DevCgfIdfy_DMA	DCOI DCOI_DMA	DCFI DCFI_DMA	B1h
DEVICE CONFIGURATION RESTORE	DevCfgRestore	DCOR	DEFR	B1h
DEVICE CONFIGURATION SET	DevCfgSet DevCfgSet_DMA	DCOS DCOS_DMA	DCFS DCFS_DMA	B1h
DEVICE RESET	DevRst	DRST		08h
DOWNLOAD	Download	DNLD		92h 93h
DOWNLOAD MICROCODE	DnldMCode DnldMCode_DMA			92h 93h
EXECUTE DEVICE DIAGNOSTIC	Diagnose	DIAG		90h
FLUSH CACHE	FlushCache	FLSH		E7h
FLUSH CACHE EXT	FlushCacheEx	FLSE	FLEX	EAh
		FLSE	FLEX	B6h
FLUSH NV CACHE	FlushNV	GTMS		
GET MEDIA STATUS	GetMedStatus			DAh
IDENTIFY DEVICE IDENTIFY PACKET DEVICE	Identify	IDFY IDPD		ECh A1h
	IdfyPktDev			
IDLE	Lalla Laa	IDLE		E3h
IDLE IMMEDIATE	IdleIm	IDLI		E1h
IDLE IMMEDIATE WITH UNLOAD	IdleIm_Unload	IDLI_UL		E1h
INITIALIZE DEVICE PARAMETERS	InitDevPara	SETP		91h
LBA2CHS	LBA2CHS	FIOT		
MEDIA LOOK	MedEject	EJCT		EDh
MEDIA LOCK	MedLock	LOCK		DEh
MEDIA UNLOCK	MedUnlock	UNLK		DFh
NCQ ABORT	NCQ_Abort			63h
NCQ ABORT ALL	NCQ_Abort_All			63h
NCQ ABORT NSTRM	NCQ_Abort_NStrm			63h
NCQ ABORT SEL	NCQ_Abort_SEL			63h
NCQ ABORT STRM	NCQ_Abort_Strm			63h

ATA Command	Instruction			OP
NCQ DATA SET MANAGEMENT	NCQ_DSM			64h
NCQ DEADLINE	NCQ_Deadline			63h
NCQ QUEUE MANAGEMENT	NCQ_QMgmt			63h
NOP		NOP		00h
QUERY NV CACHE MISSES	QueryMiss			B6h
QUERY NV CACHE PINNED SET	QueryPinSet			B6h
READ BUFFER	RdBuf	RBUF		E4h
READ BUFFER DMA	RdBuf_DMA	RBUF_DMA		E9h
READ DMA	RdDMA	RDMA		C8h
READ DMA EXT	RdDMAEx	RDMX		25h
READ DMA QUEUED	RdDMAQ	RDMQ		C7h
READ DMA QUEUED EXT	RdDMAQEx	RDQX		26h
READ DMA WITHOUT RETRIES	RdDMAN	RDMAN		C9h
READ FPDMA QUEUED	RFPDMAQ	RDMA_NCQ		60h
READ LOG DMA EXT	RdLogEx_DMA	RLEX_DMA		47h
READ LOG EXT	RdLogEx	RLEX		2Fh
READ LOG EXT COMPREHENSIVE	RdLogExComp	RLEC		2Fh
READ LOG EXT CURRENT DEVICE	RdLogExCurSts	RLECURST		2Fh
INTERNAL STATUS	<u> </u>	S		
READ LOG EXT DEVICE STATISTICS	RdLogExDevSt	RLEDEVST		2Fh
READ LOG EXT DIRECTORY	RdLogExDir	RLED		2Fh
READ LOG EXT EXTENDED POWER CONDITION	RdLogExEPC	RLEEPC		2Fh
READ LOG EXT LBA STATUS	RdLogExLBASts	RLELBASTS		2Fh
READ LOG EXT LONG PHYSICAL SECTOR	RdLogExLPS	RLELPS		2Fh
READ LOG EXT NCQ COMMAND ERROR	RdLogExQErr	RLEQERR		2Fh
READ LOG EXT NCQ SEND RECEIVE	RdLogExQSR	RLEQMSR		2Fh
READ LOG EXT SATA NCQ QUEUE	9			
MANAGEMENT	RdLogExQMgt	RLEQMGT		2Fh
READ LOG EXT SAVED DEVICE INTERNAL STATUS	RdLogExSavSts	RLESAVS TS		2Fh
READ LOG EXT SELF TEST	RdLogExSelfTest	RLET		2Fh
READ LONG	RdLong	RDLG		22h
READ LONG WITHOUT RETRIES	RdLongN	RLN	RDLGN	23h
READ MULTIPLE	RdMul	RMUL		C4h
READ MULTIPLE EXT	RdMulEx	RDME	RMEX	29h
READ NATIVE MAX ADDRESS	RdNativeMax	RNMA		F8h
READ NATIVE MAX ADDRESS EXT	RdNativeMaxEx	RNME		27h
READ SECTOR(S)	RdSec	RDSK RSEC	RS	20h
READ SECTOR(S) EXT	RdSecEx	RDSE	RSEX	24h
READ SECTOR(S) WITHOUT RETRIES	RdSecN	RDSKN RSECN	RSN	21h
READ STREAM DMA EXT	RdStrDMA	RSTD		2Ah
READ STREAM ERROR LOG	RdStrErrLog	RSTE		2Fh
READ STREAM EXT	RdStrPIO	RSTP		2Bh
READ STREAM PERFORMANCE LOG	RdStrPfmLog	RPFM		2Fh
READ VERIFY SECTOR(S)	RdVfy	RVFY	RV	40h
READ VERIFY SECTOR(S) EXT	RdVfyEx	RVFE		42h
READ VERIFY SECTOR(S) WITHOUT RETRIES	RdVfyN	RVFYN	RVN	41h
RECEIVE FPDMA QUEUED	NCQ_Receive	NCQ_RCV		65h
ALII INI/ Tashnalasii. Cani				

ATA Command	Instruction			OP
REMOVE LAB(S) FROM NV CACHE	RmvPinSet			B6h
PINNED SET				
REQUEST SENSE DATA EXT	REQS_ATA			0Bh
RETURN NV CACHE POWER MODE	RtnPwrMode			B6h
SANITIZE DEVICE –BLOCK ERASE EXT	SNTZ_Erase			B4h
SANITIZE DEVICE – CRYPTO SCRAMBLE EXT	SNTZ_Crypto			B4h
SANITIZE DEVICE – FREEZE LOCK EXT	SNTZ_FrzLock			B4h
SANITIZE DEVICE – OVERWRITE EXT	SNTZ_OVWR			B4h
SANITIZE DEVICE – STATUS EXT	SNTZ_Status	007.104		B4h
SCT LBA SEGMENT ACCESS	SCT_LSAP	SCT_LSA		
SCT DEAD LONG	SCT_LSAP_GPL	SCT_LSAP		
SCT READ LONG	SCT_RL_GPL	SCT_RL		
SCT RETURN ERROR RECOVERY CONTROL	SCT_RERC_GPL SCT_ RFC_GPL	SCT_RERC		
SCT RETURN FEATURE CONTRLL	SCT_RFC_GPL	SCT_RFC		
SCT RETURN FEATURE OPTION FLAG SCT RETURN SCT DATA TABLE	SCT_RFOF_GPL  SCT_DT_GPL	SCT_RFOF SCT_DT		1
SCT SET ERROR RECOVERY CCONTROL	SCT_DT_GPL SCT_ SERC_GPL	SCT_ SERC		
SCT SET FEATURE CONTRLL	SCT_ SERC_GPL	SCT_ SERC		
SCT SET FEATURE CONTREL  SCT STATUS REQUEST	SCT_REQST_GPL			
SCT WRITE LONG	SCT_WL_GPL	SCT_WL		
SCT WRITE SAME WITH WRITE DATA	SCT_WRSAME_	SCT_WRS		
BLOCK	BLK_GPL	AME_BLK		
BLOCK	DEN_OLE	SCT_WRS		
SCT WRITE SAME WITH WRITE DATA	SCT_WRSAME_	AME_BLK		
BLOCK FOREGROUND	BLK_FRG_GPL	_FRG		
SCT WRITE SAME WITH WRITE DATA	SCT_WRSAME_	SCT_WRS		
PATTERN	PTN_GPL	AME_PTN		
		SCT_WRS		
SCT WRITE SAME WITH WRITE DATA	SCT_WRSAME_	AME_PTN		
PATTERN FOREGROUND	PTN_GPL_FRG	_FRG		
SECURITY DISABLE PASSWORD	SecuDisPsw	SEDP		F6h
SECURITY ERASE PREPARE	SecuErasePrep	SERP		F3h
SECURITY ERASE UNIT	SecuEraseUnit	SEEU		F4h
SECURITY FREEZE LOCK	SecuFrzLock	SFZL		F5h
SECURITY SET PASSWORD	SecuSetPsw	SESP		F1h
SECURITY UNLOCK	SecuUnlock	SEUL		F2h
SEEK	SEEK			70h
SEND FPDMA QUEUED	NCQ_Send			65h
SERVICE	Service	SRVC		A2h
SET FEATURES	SetFeature	SETF		EFh
SET MAX ADDRESS	SetMaxAddr	SMXA	SMAX	F9h
SET MAX ADDRESS EXT	SetMaxEx	SAME		37h
SET MAX FREEZE LOCK	SetMaxFrzLock	SMFL		F9h
SET MAX LOCK	SetMaxLock	SMLK		F9h
SET MAX SET PASSWORD	SetMaxSetPswd_DMA	SMAP SMSP_DMA		F9h
SET MAX UNLOCK	SetMaxUnlock SetMaxUnlock_DMA	SMUN SMUN_DMA		F9h
SET MULTIPLE MODE	SetMul	SMUL		C6h
SET NV CACHE POWER MODE	SetPwrMode			B6h
SLEEP	Sleep	SLEP		E6h
SMART DISABLE OPERATIONS	SmDisable	SDSO	SMDI	B0h
SMART ENABLE OPERATION	SmEnable	SESO	SMEN	B0h
SMART ENABLE/DISABLE AUTO OFFINE	SmAutoOffline	SAOL		B0h

ATA Command	Instruction			OP
SMART ENABLE/DISABLE AUTOSAVE	SmAutoSv	SAAS	SMAS	B0h
SMART EXECUTE OFFLINE IMMEDIATE	ExeSmOI	SEOI	SMOI	B0h
SMART READ ATTRIBUTE THRESHOLDS	SmRdAtbThd	SRAT		B0h
SMART READ DATA	SmRdData	SMRD		B0h
SMART READ LOG	SmRdLog	SRLS	SMRL	B0h
SMART READ LOG COMPREHENSIVE	SmRdLogComp	SMRC	-	B0h
SMART READ LOG DEVICE	<u> </u>	SMRDEVS		
STATISTICS	SmRdLogDevSt	Т		B0h
SMART READ LOG DIRECTORY	SmRdLogDir	SMLD		B0h
SMART READ LOG LOGICAL	SmRdLogLPS	SMRLPS		B0h
PHYSICAL SECTOR	SilikaLogLi S	SIVINCE S		DOIT
SMART READ LOG SECTOR IDENTIFY	SmRdLogIDFY	SMRIDFY		B0h
DEVICE	OTTINGEOGIDI T	SWIKI DI I		Bon
SMART READ LOG SECTOR	SmRdLogSelect	SMRSEL		B0h
SELECTIVE SELF TEST				
SMART READ LOG SELF TEST	SmRdLogSelfTest	SMRT		B0h
SMART READ LOG SUMMARY	SmRdLogSum	SMRS		B0h
SMART RETURN STATUS	SmStatus	SRSS		B0h
SMART SAVE ATTRIBUTE VALUES SMART WRITE LOG	SmSvAtb SmWrLog	SSAV SWLS	SMWL	B0h
SOFTWARE RESET	Reset	REST	SRST	B0h
STANDBY	Standby	STBY	экэт	E2h
STANDBY IMMEDIATE	StandbyIm	STBI		E0h
TRUSTED NONDAT RECEIVE	TCG_Receive_	TCG_RCV		5Bh
TROSTED NONDAT RECEIVE	NData	_NDATA		JUIT
TRUSTED NONDAT SEND	TCG_Send_NData			5Bh
TRUSTED RECEIVE	TCG_Receive	TCG_RCV		5Ch
TRUSTED RECEIVE DMA	TCG_Receive	TCG_RCV		5Dh
TROSTED RECEIVE DIVIN	_DMA	DMA		JDII
TRUSTED SEND	TDG_Send			5Eh
TRUSTED SEND DMA	TDG_Send_DMA			5Fh
WRITE BUFFER	WrBuf	WBUF		E8h
WRITE BUFFER DMA	WrBuf_DMA	WBUF_DMA		EBh
WRITE DMA	WrDMA	WDMA		CAh
WRITE DMA EXT	WrDMAEx	WDMX		35h
WRITE DMA FUA EXT	WrDMAFuaEx	WDFE		3Dh
WRITE DMA QUEUED	WrDMAQ	WDMQ		CCh
WRITE DMA QUEUED EXT	WrDMAQEx	WDQX		36h
WRITE DMA QUEUE FUA EXT	WrDMAQFuaEx	WDQF		3Eh
WRITE DMA WITHOUT RETRIES	WrDMAN	WDMAN		CBh
WRITE FPDMA QUEUED	WFPDMAQ	WDMA_NCQ		61h
WRITE LOG DMA EXT	WrLogEx_DMA	WRLE_DMA		57h
WRITE LOG EXT	WrLogEx	WRLE		3Fh
WRITE LONG	WrLong	WTLG	WL	32h
WRITE LONG WITHOUT RETRIES	WrLongN	WTLGN	WLN	33h
WRITE MULTIPLE	WrMul	WMUL	\	C5h
WRITE MULTIPLE EXT	WrMulEx	WDME	WMEX	39h
WRITE MULTIPLE FUA EXT	WrMulFuaEx	WMFE		CEh
WRITE SECTOR(S)	WrSec	WDSK WSEC	WS	30h
WRITE SECTOR(S) EXT	WrSecEx	WDSE	WSEX	34h
WRITE SECTOR(S) WITHOUT	WrSecN	WDSKN	WSN	30h
RETRIES		WSECN		

ATA Command	Instruction			OP
WRITE STREAM DMA EXT	WrStrDMA	WSTD	(	3Ah
WRITE STREAM ERROR LOG	WrStrErrLog	WSTE		2Fh
WRITE STREAM EXT	WrStrPIO	WSTP	( )	3Bh
WRITE UNCORRECTABLE EXT	WUNCEX	WUNCX	4	45h
WRITE UNCORRECTABLE EXT_FL	WUNCEX_FL		4	45h
WRITE UNCORRECTABLE EXT_FNL	WUNCEX_FNL		4	45h
WRITE UNCORRECTABLE EXT_PL	WUNCEX_PL		4	45h
WRITE UNCORRECTABLE EXT_PNL	WUNCEX_PNL		4	45h
WRITE VERIFY	WrVerify	WV	(	3Ch