

Command Mapping Format

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This is a proposal on how to present a command mapping from SCSI CDB's to an ATA/ATAPI-7 device. This proposal is for a table format that provides the ability to directly translate, emulate, or not implement each field of a SCSI CDB. This is a sample using READ(12)

OP Code	Description	Pages	Field	Type	Description
A8	READ(12)				Issue ATA READ DMA EXT command (25h)
			RDProtect	N	This field is ignored. Since ATA/ATAPI-7 provides no mechanism for formatting a drive with protection information, no protection information can be returned.
			DPO	N	This field is ignored. There are no ATA commands to provide this capability.
			FUA	E	Set Features to disable caching shall be issued prior to issuing this command.
			FUA_NV	E	Set Features to disable caching shall be issued prior to issuing this command. There are no standard ATA commands for controlling NV cache separately from volatile cache.
			LBA	I	Bits 0:31 map to ATA LBA bits 0:31. ATA LBA bits 32:47 shall be cleared to zero
			Transfer Length	L	Bits 0:15 map to ATA Sector Count bits 0:15. Transfer lengths greater than 16 bits shall be converted into multiple commands
			Group Number	E	The translator can group attributes based on group number. There are no ATA commands to provide this capability
Types - N - Not Implemented E - Emulated I - Implemented directly L - Implemented with limitations					

Some of these descriptions are vague. When more precision is required, the sections following the table can describe the emulation more carefully.