

TO: T10 Members  
 FROM: Paul Suhler, Seagate Technology  
 SUBJECT: ADI: Required and Optional SCSI Commands (T10/02-106r0)  
 DATE: 11 March 2002

Following is a table listing all of the SCSI commands which might be implemented in the ADI Command (ADC) layer by a tape drive. It is a union of the commands listed in SPC-3 Rev. 5 and SSC-2 Rev. 8.

A similar table is not needed for commands forwarded (bridged) to the library by the drive. These commands are defined by SPC and SMC. The drive should be capable of forwarding any command without regard to the opcode. The forwarding feature is Optional in itself. We may need to decide whether bidirectional commands will be Optional or Mandatory in implementing forwarding, although at the moment, it is a moot point as there are no bidirectional commands for media changers.

Commands are listed as being either Mandatory (M) or Optional (O). Optional indicates that the library shall not rely upon the drive's implementing the command, and that the drive may implement the command. I think that we do not need a separate category of Prohibited. For example, I have listed as Optional those commands whose invocation via ADI would be a really bad idea, such as READ and WRITE.

Command	Requirement	Doc	Notes
ACCESS CONTROL IN	O	SPC-3	
ACCESS CONTROL OUT	O	SPC-3	
CHANGE ALIASES	O	SPC-3	
ERASE(6)	O	SSC-2	
ERASE(16)	O	SSC-2	
EXTENDED COPY	O	SPC-3	
FORMAT MEDIUM	O	SSC-2	
INQUIRY	M	SPC-3	
LOAD UNLOAD	M	SSC-2	
LOCATE(10)	O	SSC-2	
LOCATE(16)	O	SSC-2	
LOG SELECT	O	SPC-3	
LOG SENSE	O	SPC-3	
MODE SELECT(6)	O	SPC-3	
MODE SELECT(10)	O	SPC-3	
MODE SENSE(6)	O	SPC-3	
MODE SENSE(10)	O	SPC-3	
PERSISTENT RESERVE IN	O	SPC-3	
PERSISTENT RESERVE OUT	O	SPC-3	
PREVENT ALLOW MEDIUM REMOVAL	O	SSC-2	
READ(6)	O	SSC-2	
READ(16)	O	SSC-2	
READ ATTRIBUTE	O	SPC-3	
READ BLOCK LIMITS	O	SSC-2	
READ BUFFER	O	SSC-2	
READ POSITION	O	SSC-2	
READ REVERSE(6)	O	SSC-2	
READ REVERSE(16)	O	SSC-3	
RECEIVE COPY RESULTS	O	SPC-3	
RECEIVE DIAGNOSTIC RESULTS	O	SPC-3	
RECOVER BUFFERED DATA	O	SSC-2	
RELEASE(6)	O	SPC-3	
RELEASE(10)	O	SPC-3	
REPORT ALIASES	O	SPC-3	

Command	Requirement	Doc	Notes
REPORT IDENTIFIER	O	SPC-3	
REPORT DENSITY SUPPORT	O	SSC-2	
REPORT LUNS	O	SPC-3	
REPORT SUPPORTED OPERATION CODES	O	SPC-3	
REPORT TARGET PORT GROUPS	O	SPC-3	
REQUEST SENSE	M	SPC-3	1
RESERVE(6)	O	SPC-3	
RESERVE(10)	O	SPC-3	
REWIND	O	SSC-2	
SEND DIAGNOSTIC	O	SPC-3	
SEND DEVICE IDENTIFIER	O	SPC-3	
SET CAPACITY	O	SSC-2	
SET TARGET PORT GROUPS	O	SPC-3	
SPACE(6)	O	SSC-2	
SPACE(16)	O	SSC-2	
TEST UNIT READY	O	SPC-3	
VERIFY(6)	O	SSC-2	
VERIFY(16)	O	SSC-2	
WRITE(6)	O	SSC-2	
WRITE(16)	O	SSC-2	
WRITE ATTRIBUTE	O	SPC-3	
WRITE BUFFER	O	SPC-3	
WRITE FILEMARKS(6)	O	SSC-2	
WRITE FILEMARKS(16)	O	SSC-2	
1 If ADT is an autosense protocol, then REQUEST SENSE may become Optional.			