

Lexar[™]

crucial[™]



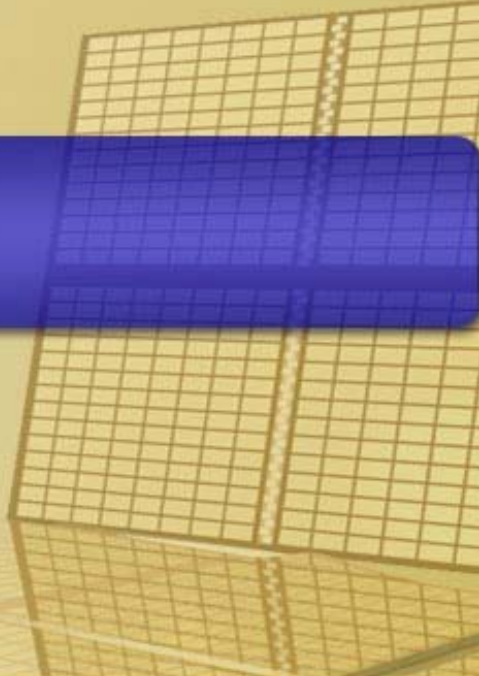
USB Protocol Review



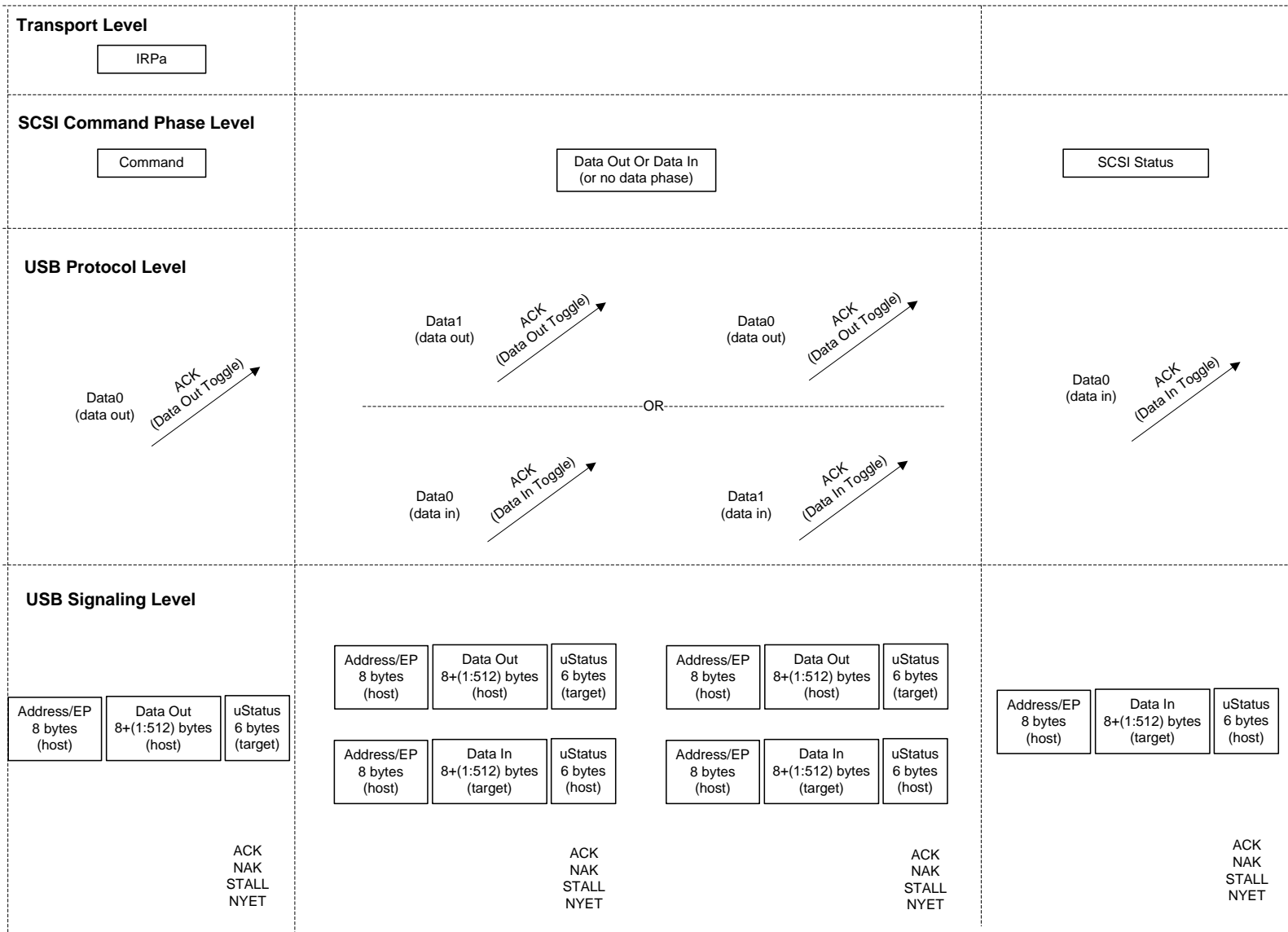
e08xxxr0



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USB Protocol Level Mapping



USB Level Map

HOST

TARGET

App

User Mode
Kernel Mode

File System

Volume

Class (Disk)

Port (USB)

Hub

EHCI

SCSI Command

?

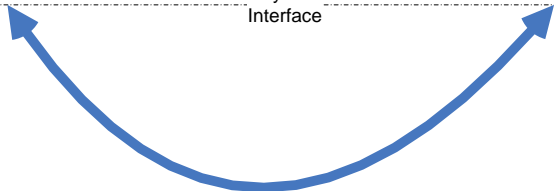
USB Protocol

?

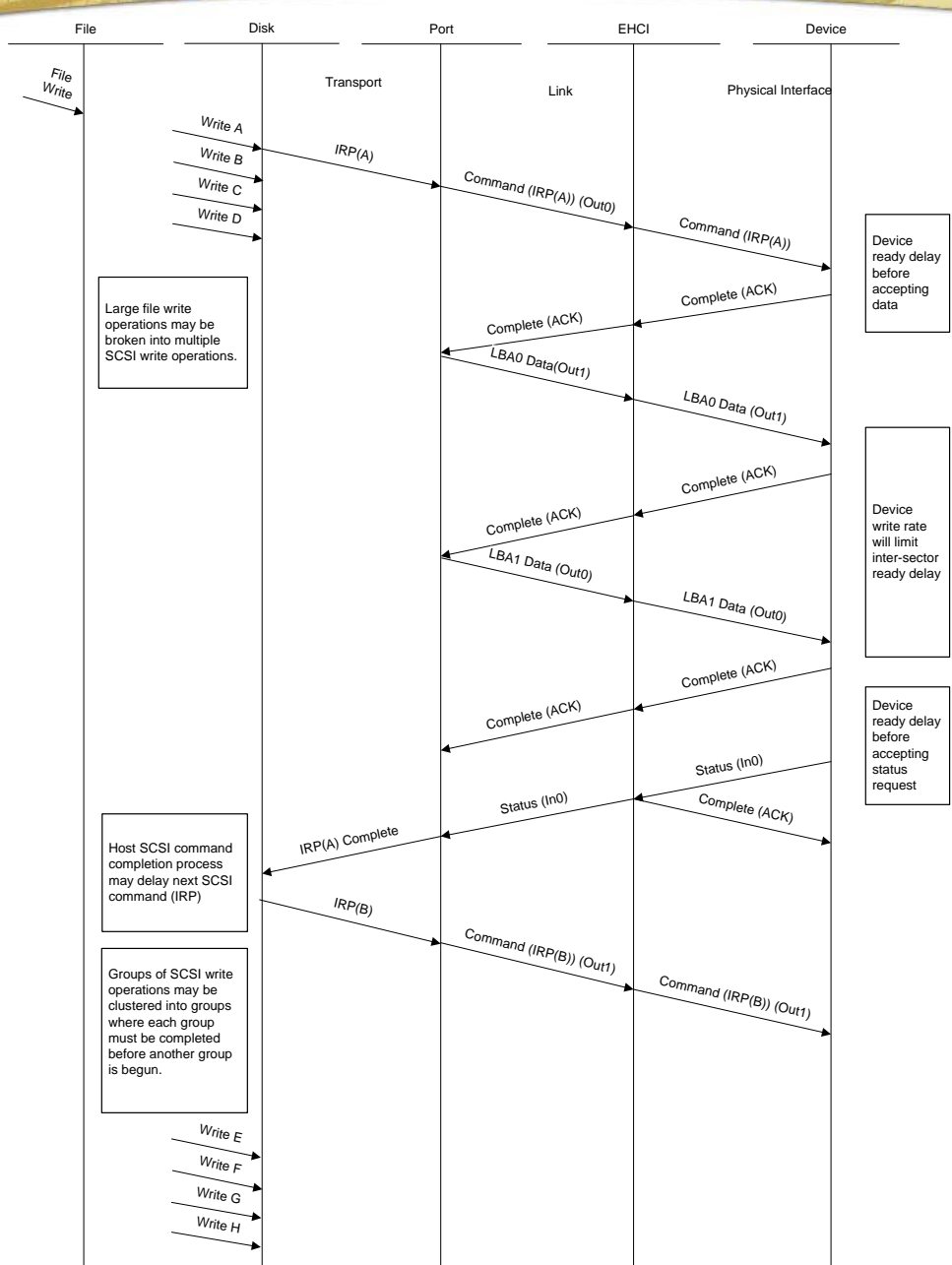
USB Signaling

?

Physical
Interface



SCSI Block Write Ladder



Large file write operations may be broken into multiple SCSI write operations.

Host SCSI command completion process may delay next SCSI command (IRP)

Groups of SCSI write operations may be clustered into groups where each group must be completed before another group is begun.

Device ready delay before accepting data

Device write rate will limit inter-sector ready delay

Device ready delay before accepting status request

SB Block Read Ladder

