Firestreamer Drivers 4.0.1: Supported SCSI Commands and IOCTLs
Updated: 2014-06-21

<u>Generic commands</u>

SCSIOP_REPORT_LUNS
    Zeroed fields: Control, Reserved1…3
    AllocationLength >= 16

SCSIOP_INQUIRY
    Zeroed fields: CommandSupportData, Control, Reserved1…2
    Supported parameters:
        EnableVitalProductData=0, PageCode=0
        EnableVitalProductData=1, PageCode=VPD_SUPPORTED_PAGES,
            VPD_SERIAL_NUMBER

SCSIOP_REQUEST_SENSE
    Zeroed fields: Control, Reserved
    Supported parameters:
        SelfTest=1, SelfTestCode=0, AllocationLength=0

SCSIOP_SEND_DIAGNOSTIC
    Zeroed fields: Control, Reserved1…2

SCSIOP_TEST_UNIT_READY
    Zeroed fields: Control, Reserved1…2

SCSIOP_MODE_SENSE(6)
    Zeroed fields: Control, Reserved1…2
    Not supported: MODE_SENSE_SAVED_VALUES
    Pages supported by changers:
        Page 0x00
        MODE_PAGE_ELEMENT_ADDRESS(0x1D)
        MODE_PAGE_TRANSPORT_GEOMETRY(0x1E)
        MODE_PAGE_DEVICE_CAPABILITIES(0x1F)
        Page 0x1F/Subpage 0x41 (MODE_EXTENDED_DEVICE_CAPABILITIES_PAGE)
    Pages supported by tape drives:
        Page 0x00
        MODE_PAGE_DATA_COMPRESS(0x0F)
        MODE_PAGE_DEVICE_CONFIG(0x10)
        MODE_PAGE_MEDIUM_PARTITION(0x11)
        FIRESTREAMER_CUSTOM_MODE_PAGE_CODE(0x31) (reports the remaining capacity)

SCSIOP_MODE_SENSE(10)
    Zeroed fields: Control, Reserved1…3, LLBAA
    See SCSIOP_MODE_SENSE(6)

SCSIOP_MODE_SELECT(6)
    Zeroed fields: Control, Reserved1…2, LogicalUnitNumber
    Not Supported: SP
    Supported densities: 0, 0x7F, 0xFE
    Changeable pages/fields by changers: none
    Changeable pages/fields by tape drives:
        MODE_PAGE_DATA_COMPRESS(0x0F)
            DCE
        MODE_PAGE_DEVICE_CONFIG(0x10)
            DCAlgorithm (0x00 or 0x01)

SCSIOP_MODE_SELECT(10)
    Zeroed fields: Control, Reserved1…2, LogicalUnitNumber
    See SCSIOP_MODE_SELECT(6)

```
SCSIOP_MEDIUM_REMOVAL
    Zeroed fields: Control, Reserved1…3, LogicalUnitNumber

SCSIOP_RESERVE_UNIT(6)
SCSIOP_RESERVE_UNIT(10)
SCSIOP_RELEASE_UNIT(6)
SCSIOP_RELEASE_UNIT(10)
    NO-OP
```

<u>Changer commands</u>

```
SCSIOP_READ_ELEMENT_STATUS
    Zeroed fields: Control, Reserved0…2

SCSIOP_MOVE_MEDIUM
    Zeroed fields: Control, Reserved1…3, Flip, LogicalUnitNumber

SCSIOP_EXCHANGE_MEDIUM
    Zeroed fields: Control, Reserved1,3, Flip1,2, LogicalUnitNumber

SCSIOP_INIT_ELEMENT_STATUS
    Zeroed fields: Control, Reserved1…3, LogicalUnitNumber

SCSIOP_INITIALIZE_ELEMENT_STATUS_WITH_RANGE_STANDARD(0x37)
    Zeroed fields: Control, Reserved1…3

SCSIOP_INITIALIZE_ELEMENT_STATUS_WITH_RANGE_OBSOLETE(0xE7)
    Zeroed fields: Reserved1…4
```

<u>Tape drive commands</u>

```
SCSIOP_ERASE(6)
    Zeroed fields: Immediate, Control, Reserved1…2, LogicalUnitNumber
    Supported parameters:
        Long=1

SCSIOP_LOCATE(10)
    Zeroed fields: Immediate, Control, Reserved1,3,4, LogicalUnitNumber
    Not Supported: BT=1, DestType>2, (CP=1 && Partition!=0)

SCSIOP_LOCATE(16)
    Zeroed fields: Immediate, Control, Reserved0…3, LogicalUnitNumber
    Not Supported: BAM=1, DestType>2, (CP=1 && Partition!=0)
    Supported parameters:
        LOCATE_LOGICAL_OBJECT
        LOCATE_LOGICAL_FILE
        LOCATE_LOGICAL_SET

SCSIOP_READ_BLOCK_LIMITS
    Zeroed fields: Control, Reserved1

SCSIOP_READ_POSITION
    Zeroed fields: Control, Reserved1…2
    Supported parameters:
        READ_POSITION_SHORT_BLOCK_ID
        READ_POSITION_LONG

SCSIOP_REPORT_DENSITY_SUPPORT
    Zeroed fields: Control, Reserved1…2

SCSIOP_LOAD_UNLOAD
    Zeroed fields: Immediate, Control, Reserved1…3, EOT
    Supported parameters:
        HOLD, LOAD
```

```
SCSIOP_REWIND
   Zeroed fields: Immediate, Control, Reserved1…2

SCSIOP_SPACE(6)
   Zeroed fields: Immediate, Control, Reserved
   Supported parameters:
      SPACE_LOGICAL_BLOCKS
      SPACE_FILEMARKS
      SPACE_SETMARKS
      SPACE_END_OF_DATA

SCSIOP_WRITE_FILEMARKS
   Zeroed fields: Immediate, Control, Reserved, LogicalUnitNumber
   Supported parameters:
      WriteSetMarks=0,1

SCSIOP_READ6
   Zeroed fields: Control, Reserved
   Not Supported: (Fixed=1 && SILI=1)

SCSIOP_WRITE6
   Zeroed fields: Control, Reserved1
```