Switch Settings And Configuration

Switch 1 (SW 1)

<table>
<thead>
<tr>
<th>Switch Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>-----SCSI ID-----</td>
</tr>
</tbody>
</table>

SW1-1 Monitor (Mon)

The 8844 control program contains RS232 monitor routines. If the adaptor is connected and the Mon switch is on, the 8844 prints onto a terminal, commands and status information for the commands being executed by the 8844. If the RS232 adaptor is not connected, or the monitor is not required this switch must be set to the off position.

SW1-2 Retry Inhibit (Rinh)

With SW1-2 in the off position, if a magnetic tape parity error is detected during a write data command, the 8844 will automatically backspace over the erroneous record, write a four inch gap, and try to re-write the defective block in a different area of tape.

If after 7 attempts to re-write the block, a parity error still exists the 8844 will terminate the write operation. During read data commands if a parity error occurs, the 8844 will automatically re-read the defective block up to seven times before terminating the operation.

No automatic error recovery will be performed if SW1-2 is in the on position.

SW1-3 SCSI Parity Inhibit (SPinh)

SW1-3 in the on position, the SCSI data bus is checked for odd parity for every byte received by the 8844. With SW1-3 in the off position, parity is not checked on the data bus.

SW1-4 Cache

SW1-4 On Inhibit Read Variable Cache.

SW1-4 Off Enable Read Variable Cache.
SW1-5 Wait

With SW1-5 In The Off Position

If the 8844 is performing a Buffer mode write operation, and a further command is received, (except for another buffer mode write operation, and buffer are available in the 8844) busy status will be returned by the 8844 and the command will not be executed.

With SW1-5 In The On Position

If the 8844 is performing a Buffer mode write operation, and a further command is received, the 8844 will wait for completion of the write operation (or wait for availability of buffers if the command received is a further buffer mode write operation) before executing the current command. Busy status will not be returned to the initiator.

SW1-6-8 SCSI ID

The 8844 SCSI address is set via SW1 positions 6-8. Every controller on the SCSI bus is assigned an individual address. The address assigned to each controller corresponds to a single bit on the SCSI data bus.

The controller address is switch selectable as follows:

<table>
<thead>
<tr>
<th>SW1</th>
<th>8</th>
<th>7</th>
<th>6</th>
<th>SCSI ID</th>
<th>SCSI Data Bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>OFF</td>
<td>0</td>
<td></td>
<td>DB0</td>
</tr>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>ON</td>
<td>1</td>
<td></td>
<td>DB1</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
<td>2</td>
<td></td>
<td>DB2</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
<td>3</td>
<td></td>
<td>DB3</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
<td>4</td>
<td></td>
<td>DB4</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
<td>5</td>
<td></td>
<td>DB5</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
<td>6</td>
<td></td>
<td>DB6</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>ON</td>
<td>7</td>
<td></td>
<td>DB7</td>
</tr>
</tbody>
</table>
Switch 2 (SW2)

<table>
<thead>
<tr>
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<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Inq Qual</td>
<td>Sper</td>
<td>Inhr</td>
<td>nu</td>
<td>Inhs</td>
<td>Fix</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Key</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SW2-1 Fixed (Fix)

With SW2-1 in the off position after power on or upon receipt of the reset signal or Bus device reset message all 8 possible LUN’s are configured into the variable length mode.

With SW2-1 in the on position, all LUN’s are configured into fixed mode, with hi speed selected. The block length is set at 512 Bytes.

SW2-2 Inhibit Sense Key 1

With SW2-2 in the off position, recovered errors, (Sense Key 1) will be reported to the initiator. If a recovered error is detected Check condition status will be reported, the Sense Key in the extended status bytes will be set to 01 - Recovered Error. With SW2-2 in the on position reporting of Sense Key 1 Recovered Error is inhibited.

SW2-4 Inhibit Retries (Inhr)

If during a Data Out phase or command phase a parity error is detected on the SCSI data bus and SW2-4 is in the off position the 8844 will send to the initiator a restore pointer message and re-enter the data or command phase awaiting re-transmission of the erroneous transfer.

If SW2-4 is in the on position retries of the defective data are inhibited.

SW2-5 Space Parity Error (SPer)

See space command physical end of data.

SW2-5 Off = Physical End Of Data = Blank Tape.

SW2-5 On = Physical End Of Data = Blank Tape or Unrecoverable Parity Error.

SW2-6, 7, 8 Inquiry Qualifier (Inq Qual)

SW2-6, 7, 8 constitute the device type qualifier which is returned in Byte 1 of the Inquiry Command as data. See Inquiry Command with regards to switch settings.
Switch Settings and Configuration

Switch 1 (SW 1)

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<td>SCSI ID</td>
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<tr>
<td></td>
<td>Wait</td>
</tr>
<tr>
<td></td>
<td>Cache</td>
</tr>
<tr>
<td></td>
<td>Spinh</td>
</tr>
<tr>
<td></td>
<td>Rinh</td>
</tr>
</tbody>
</table>

SW-1 Monitor Enable (Mon)

The 8124 control program contains RS232 monitor routines. If the
RS232 adaptor is connected and the Mon switch is on, the 8124
prints onto a terminal, commands and status information for the
commands being executed by the 8124. If the RS232 adaptor is not
connected, or the monitor is not required this switch must be set
to the off position.

SW-2 Retry Inhibit (Rinh)

With SW1-2 in the off position, if a magnetic tape parity error
is detected during a write data command, the 8124 will
automatically backspace over the erroneous record, write a four
ingh gap, and try to re-write the defective block in a different
area of tape.

If after 7 attempts to re-write the block, a parity error still
exists the 8124 will terminate the write operation. During read
data commands if a parity error occurs, the 8124 will
automatically re-read the defective block up to seven times
before terminating the operation.

No automatic error recovery will be performed if SW1-2 is in the
on position.
SW - 3 SCSI Parity Inhibit (SPinh)

With SW 1 -3 in the on position, the SCSI data bus is checked for odd parity for every byte received by the 8124. With SW 3 -1 in the off position, parity is not checked on the data bus.

SW1-4 Inhibit Cache

SW1-4 OFF  Enable Read Variable Cache
SW1-4 ON  Disable Read Variable Cache

SW1-5 Wait

With SW1-5 in the off position.

If the 8124 is performing a Buffer mode write operation, and a further command is received, (except for another buffer mode write operation, and buffers are available in the 8124), Busy status will be returned by the 8124 and the command will not be executed.

With SW1-5 in the on position.

If the 8124 is performing a Buffer mode write operation, and a further command is received, the 8124 will wait for completion of the write operation (or wait for availability of buffers if the command received is a further buffer mode write operation) before executing the current command. Busy status will not be returned to the initiator.
Switch 2 (SW2)

Switch Number  8 7 6 5 4 3 2 1

Inq Qual  SPer InhR InhQ InhS Fix
Key

SW2-1 Fixed (Fix)

With SW2-1 in the off position after power on or upon receipt of the reset signal or bus device reset message all 8 possible LUN's are configured into the variable length mode.

With SW2-1 in the on position, all LUN's are configured into fixed mode, with hi speed selected. The block length is set at 512 Bytes.

SW2-2 Inhibit Sense Key 1

With SW2-2 in the off position, recovered errors, (Sense key 1) will be reported to the initiator. If a recovered error is detected Check condition status will be reported, the Sense Key in the extended status bytes will be set to 01 - Recovered Error. With SW2-2 in the on position reporting of Sense Key 1 recovered Error is inhibited.

SW2-3 Inhibit Queues (InhQ)

SW2-3 on = inhibits command queuing
SW2-3 off = enables command queuing.
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SW2-4 Inhibit Retries (InhR)

If during a Data out phase or command phase a parity error is
detected on the SCSI data bus and SW2-4 is in the off position
the 8124 will send to the initiator a restore pointer message and
re-enter the data or command phase awaiting re-transmission of
the erroneous transfer.

If SW2-4 is in the on position retries of the defective data are
inhibited.

SW2-5 Space Parity Error (SpEr)

See space command physical end of data.

SW2-5 off = Physical end of data = Blank Tape.

SW2-5 on = Physical end of data = Blank tape or unrecoverable
parity error.

SW2-6, 7, 8 Inquiry Qualifier (Inq Qual)

SW2-6, 7, 8. constitute the device type qualifier which is returned
in Byte 1 of thre Inquiry command as data. See Inquiry command
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