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TO: Distribution

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SUBJECT: Mark 5A Input/Output Board Control/Status

The PCI interface on the Mark 5A Input and Output Boards must be able to exercise certain and control and status functions, which are listed here:

<u>Mark 5A Input Board</u>

Control

- 32/64 track mode or straight-through (ST) mode [2 bits]

- Board active/inactive [1-bit]

Status

- 32/64/ST track mode [2 bits]

- Board active/inactive [1-bit]

Note: The active/inactive function might also be controlled either by:
1. The DIR signal on the FPDP bus, which indicates whether the StreamStor is in receive or transmit mode, or
2. A signal on an (otherwise) unused wire on the FPDP bus controlled by the Output Board. This would be designed such that if the Output board is placed in Playback mode, the control signal would force the Input Board to be inactive. If the Output Board in missing (an unlikely circumstance), the Input Board should default to active.

<u>Mark 5A Output Board</u>

Control

- Board active (driving data clock)/inactive (receiving data clock) [1-bit]
- 32, 64, ST or auto 32/64 mode [2 bits]
- Output clock rate [32 bits]
- Select two tracks to be transmitted to decoder [12 bits]

Status

- Board active/inactive [1-bit]
- 32, 64, ST or auto 32/64 mode [2 bits]
- Output clock rate [32 bits]
- 'synced' to data [1-bit] – i.e. tape-frame boundaries properly detected
- 32/64 track mode [1 bit] – determined automatically by board
- Selected tracks [12 bits]

Note: The active/inactive function might also be controlled as indicated in the note above.