SLIC Status

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• **Purpose:**
  - Data Reduction
    * Data From: PDT, MDT, C/FMSC, L1MU
    * 146 cables / ~100B/cable/event
    * Note: MBT to Alpha (max 7 inputs)
  - (pre)Pre-Processing
    * A or BC Stubs ($\eta, \phi$) w/ timing + L1
    * 7 Algorithms required

• **The SLIC**
  - Inputs: 16 Hotlink (16 MB/s)
  - Link: point-to-point data path (40 MHz)
    Proc: 4 TI C6201 DSPs (200 MHz)
  - Format: 1 TI C6201 DSP
  - Output: 2 (copies) Hotlink (16 MB/s)
  - Physically:
    * 1 Motherboard (Input / Link / Output / VME)
    * 5 DSP Daughterboards (Link / DSP / VME)
  - Require 18(11C, 7F) SLICs in 2 Crates
## Production Status & Plans

### 1/99
- 1\textsuperscript{st} DSP Board Proto $\rightarrow$ Nevis (now 5)

### 4/99
- SLIC Board Proto $\rightarrow$ Nevis

### 9/99
- Functionality Tested
  - SLIC/DSP Board Hardware 100%
  - Firmware 90%
  - DSP Utility Code (asm) 80%
  - Test Suite (pc-Bit3-vme-slic) 80%

### 9/2/99
- 96 DSP Boards+comps $\rightarrow$ Assembler

### 9/22/99
- 20 SLIC Boards+comps $\rightarrow$ Assembler

### 9/27/99
- 2 Pre-Prod DSP Boards $\rightarrow$ Nevis  \textbf{OK}

### 10/8/99
- 10 Prod DSP Boards $\rightarrow$ Nevis

### 10/8/99
- 1 Pre-Prod SLIC Board $\rightarrow$ Nevis

### mid 11/99
- Start remain DSP Assembly 1 wk

### mid 11/99
- Start remain SLIC Assembly 1-2 wk

- **Final Production:**
  - 20 SLIC Boards
  - \approx 100 DSP Boards

- **Schedule Risk if Production Slips:** \textbf{Minimal}
  - All SLICs not needed until installation (end 7/00)
## To Do List

<table>
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<tr>
<th>Date</th>
<th>Task Description</th>
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<tr>
<td>10/31/99</td>
<td>Final Scheme for Block Xfer from DSP</td>
</tr>
<tr>
<td>01/01/00</td>
<td>Memory Management in DSP</td>
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<td></td>
<td>Streamline Code (asm→c?)</td>
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<tr>
<td>10/31/99</td>
<td>Block Fragmentation in DSP5 (mainly firmware)</td>
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<td>10/15/99</td>
<td>Test w/ other boards (MBT)</td>
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<tr>
<td>01/01/00</td>
<td>Test Suite 95% complete</td>
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<td>Monitoring Designed</td>
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<td><strong>DSP Algorithms</strong></td>
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<tr>
<td>02/00</td>
<td>- 1&lt;sup&gt;st&lt;/sup&gt; Trial: Low Pt A-Stubs</td>
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<tr>
<td>???</td>
<td>- Other Algorithms</td>
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