

NCSX June 2007 ETC TABLE V - Basis of Estimate

Backup Information

Hardware requirements for e-beam mapping

| | | |
|--|---|--|
| Equipment rack | isolating a-c power ethernet link camac crate, system clock, etc Single point grounding | Sichta? Sichta Sichta |
| Camera | (borrowed from NSTX) Move camera to port on NCSX Modify port to accept camera Move control hardware to NCSX rack timing module/channel for camera MDS tree for camera data Camera filters Cable runs | Stratton Stratton Stratton Sichta Sichta Stratton |
| Electron gun | (borrowed from Auburn) Modify NCSX port Modify gun probe to fit NCSX port Duplicate/borrow control hardware from NSTX probes Slow (≈ 1 kHz) acquisition system to record filament parameters (908?) Bias supply (100V, e.g., Kepco BOP-100-1M \approx \$3000) Digital control for bias supply (D-to-A module?) Cable runs | Stratton/Knowlton Stratton Sichta Fredrickson Sichta |
| Swept fluorescent rod (borrowed from Auburn) | Modify NCSX port and gun Duplicate/borrow control hardware from NSTX probes Control hardware to remotely sweep rod (stepper motor controller?) Cable runs | Stratton Stratton Stratton/Knowlton |

Testing system at Auburn

Data Acquisition Hardware

Sichta M&S: \$10K
[computer, LabVIEW, timer card, d/a, a/d, motor controller, network].
hardware & software labor: 300 hours
[requirements/design/select_parts/fdr/code/test].

Additional:
mechanical stuff, installation, post-acquisition software analysis & visualization.

EBEAM mapping tasklist.xls

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