

	<b>Procedures in place for component accountability and yield statistics</b>		
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**(Preliminary DRAFT)**  
**SCT Barrel Module Site Qualification**

**Procedures in place for component accountability and yield statistics**

**Abstract**

<i>Prepared by:</i> <b>K. Hara</b>	<i>Checked by:</i>	<i>Approved by:</i>
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*Distribution List*

## **1 Accountability and Yield statistics**

The components of barrel modules are:

ASIC chips

Hybrids (bhHybridK4)

Silicon detectors (bmSiDetectorOut)

Baseboard Assemblies (bmBaseAssy)

Glues (bmGlueThermal, bmGlueElectric)

where QA data are available in the SCT database only for silicon detectors (as of December 2001).

The same silicon detector datafiles, which are used to upload on to the SCT database, are received from the manufacture, and are used to check the various distributions. Based on such distributions, detectors with small number of defect channels and little leakage current are selected for the modules. The statistics distributions are periodically updated and are made available on the web (<http://hep-www.px.tsukuba.ac.jp/~hara/sct.html#6>).

The ASIC chips and baseboard assemblies are received with appropriate data sheets attached. The data are presently stored in an Excel-based database. The 3D profiles of baseboard assemblies are measured with Quick Vision Pro250 before using them for module construction. The results with appropriate distribution plots are also stored in the Excel database.

The other two components, hybrids and glues, are fabricated or purchased domestically, and detailed QA data are stored in an Excel file. Using the measured values, each hybrid is automatically judged good or not, which is the basic guideline for further usage. The distributions are periodically updated and checked. The data will be uploaded on to the SCT database as soon as the format and the procedure are established.

Specified personnel who owe the responsibility for updating and reporting maintain the Excel files.