Procedure for Component Accountability and Yield Statistics: USA Module Assembly
Version 1.0
18-July-2002

Revision History
V0.5 RAL version
V1.0 edited for USA

All USA module assembly data are recorded electronically either immediately on construction or soon afterwards. Construction and QA data will be uploaded to a central storage repository at LBL. All components are traceable via ATLAS serial numbers or ASIC-numbers (site-lot-wafer-position format). Further consideration is given below to the procedure for detectors, ASICs and passive-stuffed hybrids.

Detectors
Detectors for the USA modules originate in Japan. Tracking of detectors is managed entirely by the SCT database. After fabrication and quality checks, the manufacturer registers the detectors in the database, together with all test data, interfaces directly to KEK. Quality control test data of the detectors in Japan are uploaded directly to the SCT database. Comprehensive reports of detector shipments, and all detector test data from the manufacturer and from ATLAS institutes, are available via a java graphical user interface to the database.

A local database at LBL tracks detectors during module assembly.

ASICs

ASICs used for US modules are probed at UCSC and the data is logged into a database there. Records are kept of chips sent to LBL. Chip numbers used on US modules are stored in the hybrid/module traveler spreadsheets which can be view from our production web site. Data sheet accompany chip shipments to from UCSC. For hybrids assembled or reworked at USCS data is already local.

Baseboards

Baseboards received at LBL are logged on a local database spreadsheet. As they are consumed the b/b number is logged in the hybrid/module traveler.

Hybrids

Hybrids received at LBL or UCSC are logged in a local database spreadsheet. As they are consumed the hybrids numbers are recorded on the web accessible hybrid/module travelers. Hybrid numbers are also loaded into the ATLAS database as part of module assembly logging.

Glue and BN

Consumables are logged locally and inventory tracked through a local spreadsheet. Batch numbers are included in hybrid/module travelers.