

## **ABCD Inventory for Barrel Hybrid Construction**

SCT Week

23-Sep-2003

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23-Sep-2003

**ABCD Inventory for Hybrid Construction** 



## **Perfect Chip Count**

As of 30-Aug-03, the count of perfect ABCD chips is as follows:

<b>Total number of Perfect Chips found at Wafer Test:</b>		
Perfect Chips in last fab lot which appears to fail X-ray QA:		
Estimate of Chips lost due to two specific saw/pick problems:		
Remaining Perfect Chips:		
Estimate Loss Rate for Remaining Saw/Pick:	0.7%	
Estimate Loss for Remaining Saw/Pick:		
Remaining Perfect Chips Delivered for Assembly:	51,723	



## **Chip Distribution So Far**

#### As of 30-Aug-03, the count of perfect ABCD chips is as follows:

	From SCIPP	From RAL	From CERN	Totals
KEK - as chips	11,717	111		11,828
KEK - as wafers	1,389			1,389
Birmingham		2,757		2,757
LBNL/SCIPP	2,527			2,527
Freiburg	415			415
Hybrid SA – as wafers	2,682	1,225	3,540	7,447
Total Distributed:	18,730	18,730	18,730	18,730



There are 1-bad-channel chips still remaining which fall into the following two categories:

- 1 channel with analogue parameters out of spec (labeled AA1) (~15K)
- 1 channel completely dead (labeled AD1) (~23K)
  - These include stuck-on channels as well as stuck-off, but we do not yet know the split between the two types.



# **IC Allocation Plan**

Mike's plan for chip allocation presented to the Steering Group is as follows:

- For Barrel:
  - ~26.7k perfect ICs
  - ~8k AA1 type ICs
  - For remaining series production, each cluster will first use up their quota (the quota = 12x number of modules to be shipped) of perfect ASICs to build modules.
  - To avoid end of batch losses the last hybrid of a lot should be completed with AA1.
  - For rework AA1 ASICs to be used
  - When the quota of perfect ASICs are exhausted, hybrids will be built with 12 AA1 ASICs/hybrid
  - All remaining AA1s and AD1 (only stuck-off) will be picked and stored in gel-packs