

Introduction

Report of the results of the test on three IB-STAVEs. Note that in the following, the nine chips of the Staves are numbered from 0 to 8.

IB-STAVE-E103

The wire-bonds of chip0 have been disconnected.

Chips from 1 to 8 can be used without any issue. It can be used both at 600 Mb/s and 1.2 Gb/s.

IB-STAVE-C104

The Stave shows an high bias current (~ 30 mA at $V_{bb} = -3V$) and DVDD current (~ 200 mA at 1.8 V). Use it without back-bias voltage ($\rightarrow V_{bb} = 0V$).

Chips 0, 3, 6, 7, 8 have about 1500 dead pixels.

It can be used at 600 Mb/s. At 1.2 Gb/s, it could operate at high values of charge pump ($>8-10$).

IB-STAVE-A105

The wire-bonds on chip6 have been removed.

The Stave can work without transmission errors at 600 Mb/s. Operations at 1.2 Gb/s are potentially possible using higher voltage or high values for the charge pump (≥ 8).

Disabling chip 7 and 8, readout performance at 1.2 Gb/s with nominal settings looks better.

IB-STAVE-C105

Chip 2 and 8 have about 4000 (among them, ~ 1450 dead) and 400 bad pixels, respectively. It can operate at 600 Mb/s. It can potentially work at 1.2 Gb/s using high charge pump values (≥ 7).

A) #7 chip add \leftrightarrow used for broadcast.

1) do #7 first.

2) program the rest.

B). FPC will be modified to fix this program issue.