Sensor overview

The wafer has 26 identical strip sensors numbered by their coordinates on the wafer. There are five rows and six columns, so a sensor on row N and column M is denoted XNYM. Figure 1 shows and overview of the wafer with numbers indicated on the

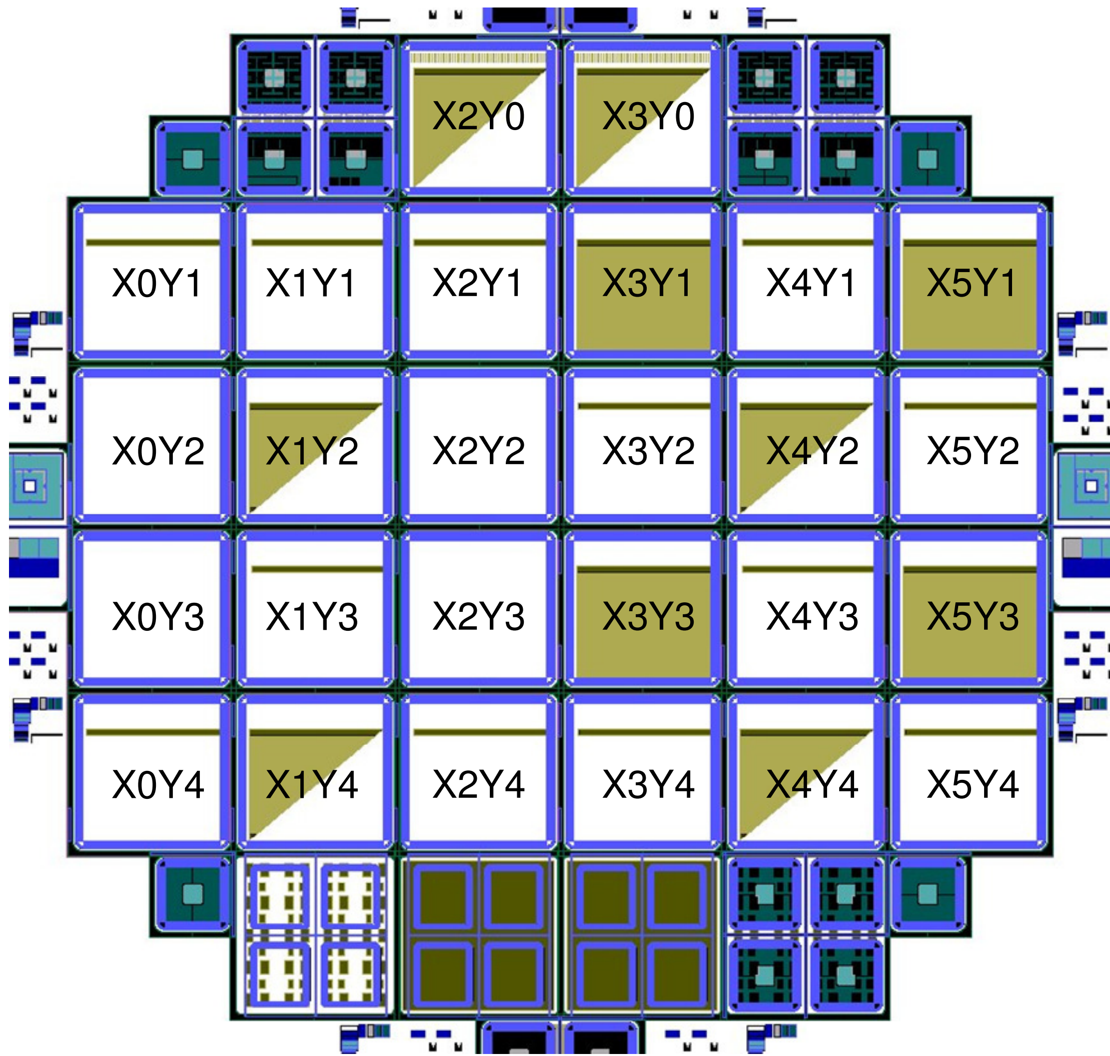

Figure 1: Number scheme of the post-processed wafers from Run 1.

Sensor and process variants

Process run 1 consisted of ten wafers, four electrical grade and six mechanical grade wafers. The wafers are marked with a number at the edge of the wafer, close to the longer straight section of the circumference. Table 1 lists the wafer numbers and the process variants.

Wafer number	BCB thickness	Type
w09	12 µm	Electrical
w08	12 µm	Electrical
w04	12 µm	Mechanical
w05	12 µm	Mechanical
w16	12 µm	Mechanical
w14	6 µm	Electrical
w15	6 µm	Electrical
w17	6 µm	Mechanical
w18	6 µm	Mechanical
w19	6 µm	Mechanical

Table 1: The process variants of the 10 wafers of the first run.

There are two different variant in the pad connections. The top two sensors, X2Y0 and X3Y0, only have connections to the strip pads (129 out of 131 strips). The rest of the sensors have connections to the strip pads (123 out of 131 strips), connections to bias resistors (every second strip, 61 out of 131 strips) and four strip pads have two via connections intended for via resistance measurements. The 26 sensors on each wafer have five different ground plane configurations, as listed in Table 2.

GND plane type	Sensor number
No GND plane	X2Y2, X0Y2, X2Y3, X0Y3
Solid GND plane	X5Y1, X3Y1, X5Y3, X3Y3
Triangular GND plane	X3Y0, X2Y0, X4Y2, X1Y2, X4Y4, X1Y4
50% fill 50 µm line width	X2Y1, X0Y1, X2Y4, X0Y4
50% fill 100 µm line width	X4Y1, X1Y1, X4Y3, X1Y3
25% fill 37 µm line width	X5Y2, X3Y2, X5Y4, X3Y4

Table 2: The ground plane configurations of the 26 sensors on the wafer