

### 5.8 Ladder readout sequence

The strips in each silicon wafer are read out by 6 Alice128 [5][6] chips. The connections of the strips to the Alice128 chip are not in sequential order, due to routing constraints. Thus, the order in which the ADC values appear does not correspond to the geographical order of the strips. The following two lists define the correspondence. The first list consists of the readout order, where the entry position corresponds to the physical silicon strip number. The second list consists of silicon strip numbers, ordered by readout order. Note that the lists contain 128 entries; the pattern is repeated for each of the six Alice128 chips connected to a wafer.

<pre>//table of ALICE128 readout order ordered by silicon strip numbers int fwd_table[128] = { 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 128, 126, 124, 122, 120, 118, 116, 114, 112, 110, 108, 106, 104, 102, 100, 98, 96, 94, 92, 90, 88, 86, 84, 82, 80, 78, 76, 74, 72, 70, 68, 66, 64, 62, 60, 58, 56, 54, 52, 50, 48, 46, 44, 42, 40, 38, 36, 34, 32, 30, 28, 26, 24, 22, 20, 18, 16, 14, 12, 10, 8, 6, 4, 2, 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63 };</pre>	<pre>//table of silicon strip numbers ordered by ALICE128 readout order // note: values run from [1,...,128] int rev_table[128] = { 97, 96, 98, 95, 99, 94, 100, 93, 101, 92, 102, 91, 103, 90, 104, 89, 105, 88, 106, 87, 107, 86, 108, 85, 109, 84, 110, 83, 111, 82, 112, 81, 113, 80, 114, 79, 115, 78, 116, 77, 117, 76, 118, 75, 119, 74, 120, 73, 121, 72, 122, 71, 123, 70, 124, 69, 125, 68, 126, 67, 127, 66, 128, 65, 1, 64, 2, 63, 3, 62, 4, 61, 5, 60, 6, 59, 7, 58, 8, 57, 9, 56, 10, 55, 11, 54, 12, 53, 13, 52, 14, 51, 15, 50, 16, 49, 17, 48, 18, 47, 19, 46, 20, 45, 21, 44, 22, 43, 23, 42, 24, 41, 25, 40, 26, 39, 27, 38, 28, 37, 29, 36, 30, 35, 31, 34, 32, 33 };</pre>
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