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Double-sided Silicon Strip Detector for the study of Double Hypernuclei II TAKEHIRO ISHIKAWA, Kyoto University — The DSSD has an effective area of 64 mm × 32 mm, the thickness of 300 μm and 50 μm strip pitch. A number of strip-readout are 1280 channels in p-side and 640 channels in n-side, which correspond to 10 and 5 VA chips installed on the DSSD. We use a V550 C-RAMS (CAEN Readout for Analog Multiplexed Signals) ADC module as an ADC and a V551B C-RAMS module as a controller. In order to evaluate the performance of the DSSD in terms of the S/N ratio, we measured the pluse height distribution of β-ray passing the DSSD from a 90 Sr source. We took about 100,000 events data at variouse bias voltages, in order to check the depletion depth. At the bias voltage of ±40 V, we have obtained the S/N ratio as 33.76 ± 0.14 at p-side and 22.49 ± 0.09 at n-side for the minimum ionizing particles. The present results show the DSSD has sufficient S/N ratio to detect both Ξ^- and K^+ .

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