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SMAUG_ND_1 - an integrated circuit that implements the prototype method of indirect voltage measurements by measuring the noise distribution curve.

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We present the design of the integrated circuit named SMAUG_ND_1 which implements the prototype of the method of indirect voltage measurement by measuring the noise distribution curve [1]. The IC is designed in a CMOS 28nm process. The die size is 1x1mm² and contains a 7x7 matrix with 68 μm pixel pitch. The chip allows testing of the prototype method in coincidence with the CDS algorithm.

[1] G. Węgrzyn, R. Szczygieł, Przegląd Elektrotechniczny, 10/2021, 161-163

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