

Fig. 1. The mean and RMS of readout latency as a function of particle flux (~event generation) for different readout clock speeds.

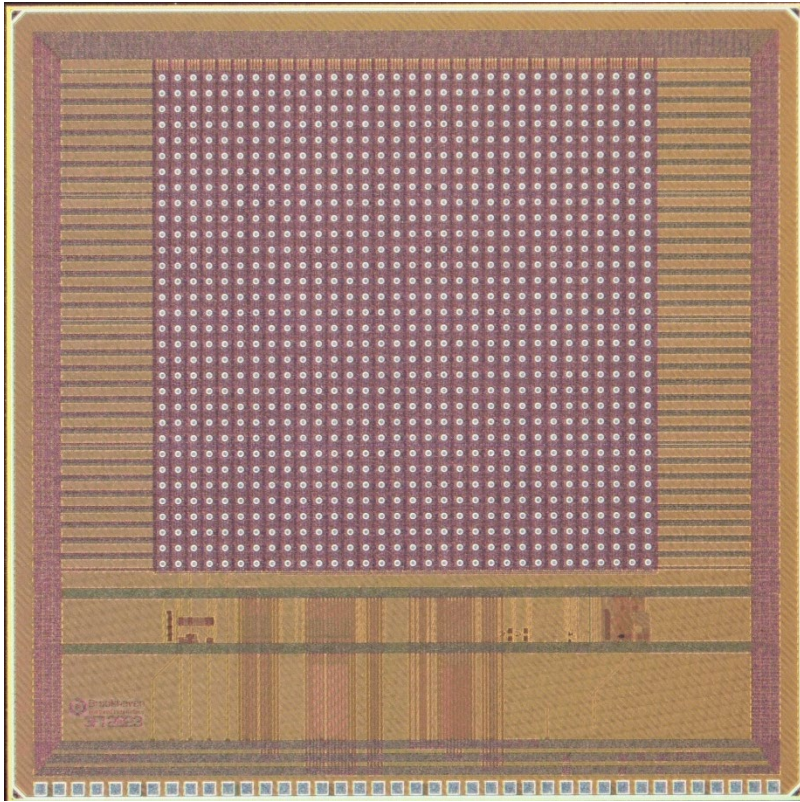


Fig. 2. EDWARD65P1: Test chip built on the skeleton of X-ray detector readout chip

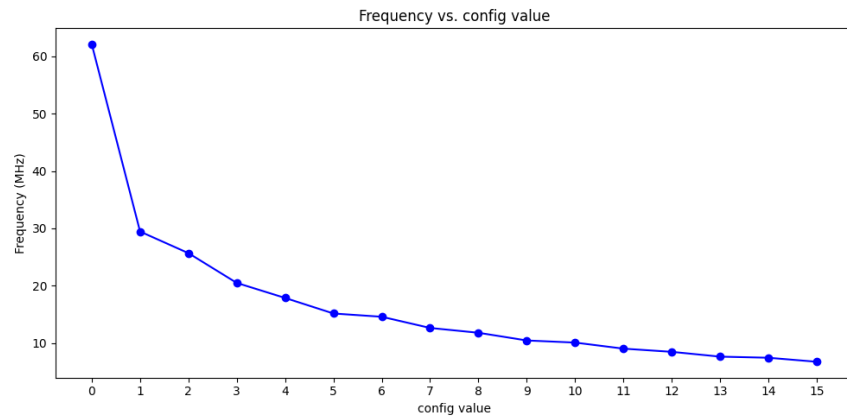
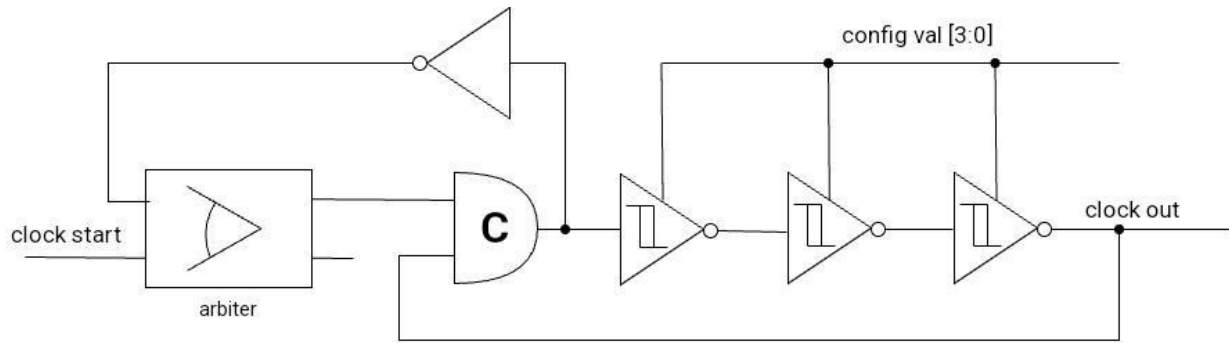


Fig. 3. Block diagram of in-pixel clock generator and the frequency vs. configuration value plot

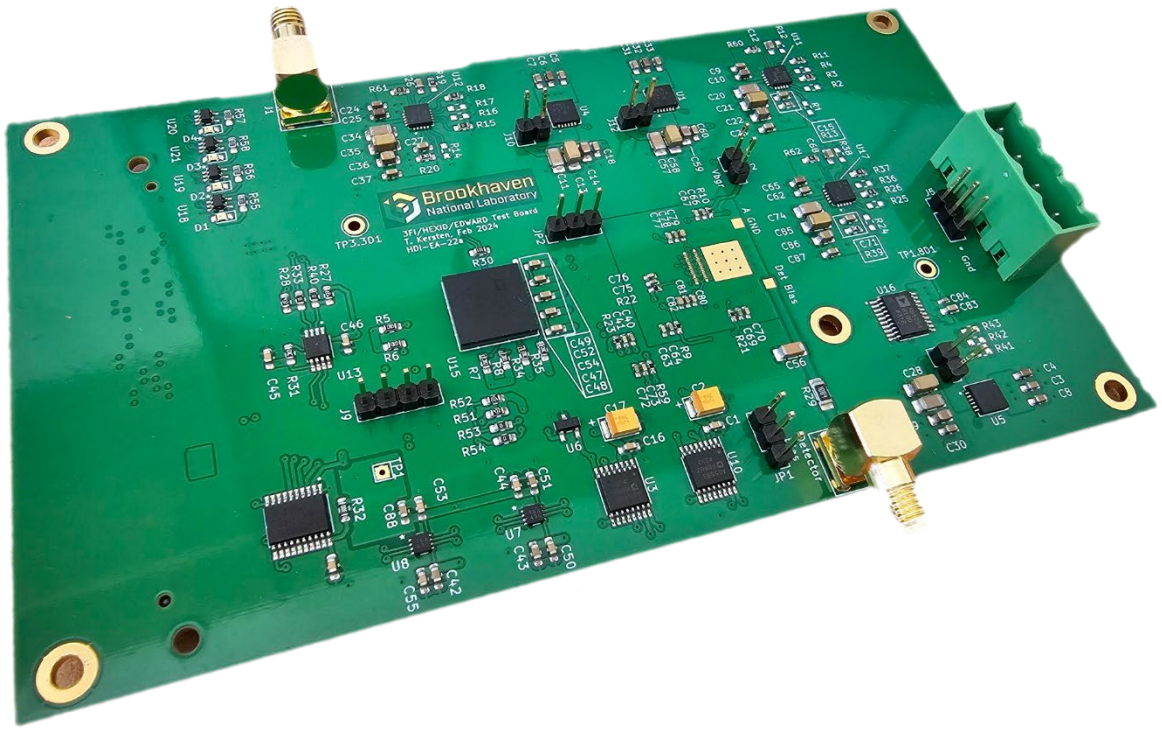


Fig. 4. Testbench

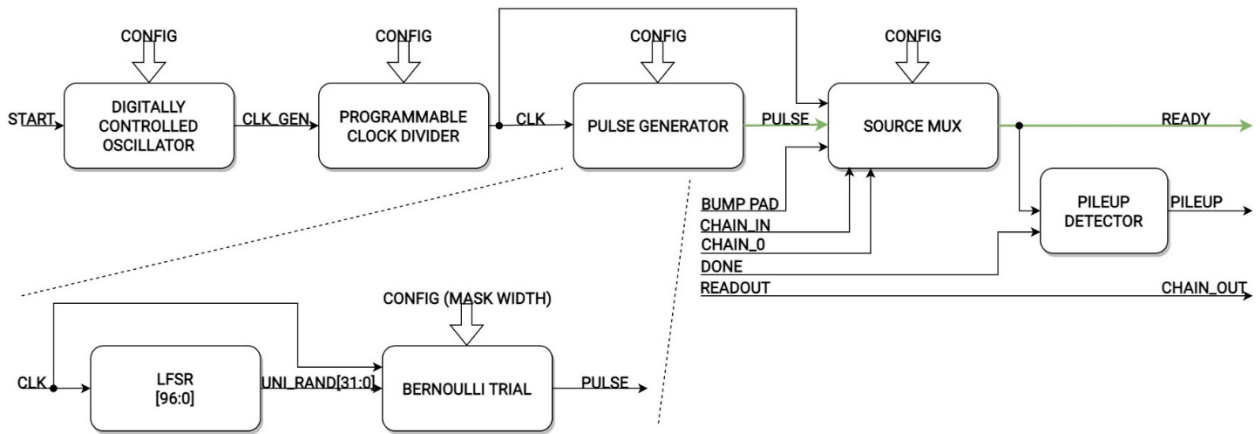


Fig. 5. Block diagram for the signal generator implemented in the EDWARD65P1 chip [4]

## References

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- [6] A. Veiga and E. Spinelli, 'A pulse generator with poisson-exponential distribution for emulation of radioactive decay events', in *2016 IEEE 7th Latin American Symposium on Circuits & Systems (LASCAS)*, 2016.