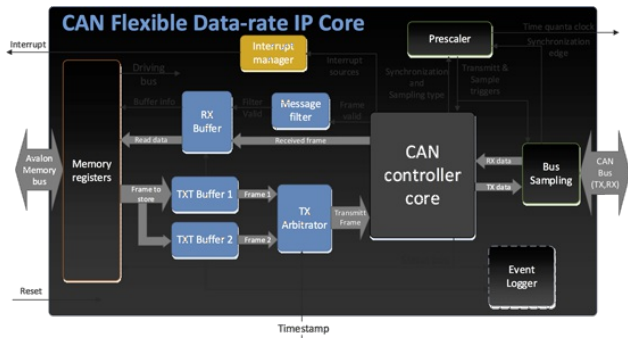


## CAN FD core as an open source project

The Czech Technical University of Prague is developing a CAN FD core. It is intended to provide the core under open source conditions.



Block diagram of the CAN FD IP core (Photo: Czech Technical University of Prague)

Since some years, there are several commercial CAN FD cores on the market. Now, the Czech Technical University of Prague offers its IP core under MIT open source license. Of course, the implementer needs to negotiate IP rights. Especially, Bosch has some IP rights on the CAN FD protocol and its implementation. The Faculty of Electrical Engineering (Department of Measurement) has designed the core in VHDL (Very High Speed Integrated Circuit Hardware Description Language) a CAN FD (flexible datarate) core. This development is intended to be shared under open source conditions. Volkswagen sponsors this project. The design has been tested on Zynx Zync and Altera FPGAs (field programmable gate array).

Once conformance tested according to ISO 16845-1:2016, the VHDL model will be offered free-of-charge under MIT license.

Students started this project. The current status of the IP core development is documented on [Github](#). The project is still under development. In particular, additional testing of the IP core is necessary. This includes implementing event logger and error detection feature tests.

Also other universities are working on CAN FD cores, for example, the Soongsil University in Seoul.

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