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# FPGA shore station demonstrator for KM3NeT

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The KM3NeT readout concept is based on a point-to-point optical network connecting the ten thousand optical modules in the deep-sea neutrino telescope with the shore station. The numerous fibre optic channels arriving at the shore station will be concentrated on the shore electronics systems, which will receive, merge and time order the data, and send them to the DAQ system. Although the network functionality is bi-directional, the physical channel allocation is asymmetric; most channels are assigned to the data reception and only a few channels are used for control with data transport from shore to the telescope.
We will discuss the FPGA based platform systems for the shore station and the appropriate firmware implementation for the data gathering and broadcast demands of a neutrino telescope. We will present our experiences based on FPGA evaluation platforms suitable to build a demonstrator of the KM3NeT shore station.

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