Most experimental areas of Cosmology base their observations on extremely small or faint signals embedded in noise. The newer generations of experiments in areas such as direct search of cold dark matter, dark energy, CMB, 21cm, holometers, gravitational waves, etc. require detectors with low noise levels only achievable by detectors working at cryogenic temperatures. Although cosmic experiments with cryogenic detectors are not new (e.g. CDMS, LZ, DAMIC, PICO, NIKA, SPT3, ACT, etc.) the new generations are being proposed with an unprecedented increase in the number of detector channels. Channel count increases of over an order of magnitude imply major architectural redesign in cryogenic detector architectures due to increased thermal loads, electronic and mechanical constraints. The warm electronics and DAQs for these experiments must accompany or even lead the detector architectures. This talk will look at upcoming challenges in experimental cosmology and trace a roadmap for the new generation of DAQs for large channel cryogenic based detectors for cosmology experiments for the next decade and beyond.