

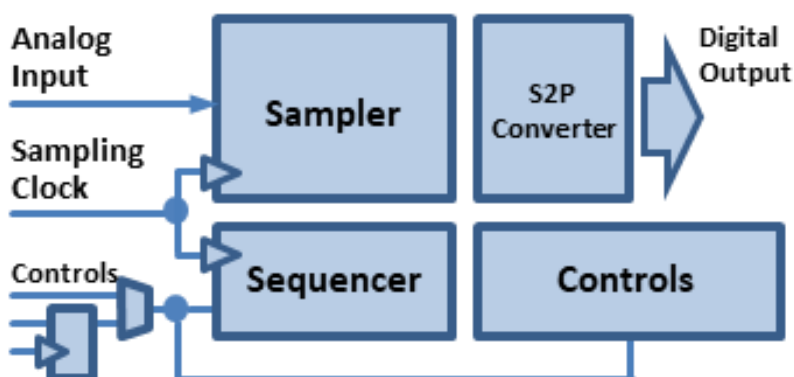
# Technical Brief

## 6-BIT, 1.2GSPS, SINGLE CHANNEL ADC FOR TELECOMMUNICATION APPLICATIONS

### Overview

This single channel ADC samples up to 1.2Gbps and produces continuous flow of 6-bit parallel words. Designed for multi-gigabit telecommunication applications e.g. DSP-based SerDes/CDR. Small footprint, low power and low input capacitance enable time-interleaved stacking for higher sampling rates.

### Block Diagram



### Highlights

- Single sampling channel
- Sampling rate up to 1.2Gbps
- Resolution: 6-bit, ENOB - TBD
- Input voltage range: 600mVppd
- CMOS levels at all outputs and inputs
- Synchronous serial and asynchronous parallel (bypass) control interface
- Supply voltage: 900mV core, 1.8V or 2.5V at in/out – optional
- Consumption: 25-30mA typ. at 1.2Gbps
- Power down mode
- Temperature range: -40C to +110C
- Footprint: TBD
- Process: TSMC 28nm HPM, HPC/HPC+, can be ported to more advanced nodes

All information is preliminary