

PROGRAMMABLE DIGITAL BPSK DEMODULATOR & BIT SYNCHRONIZER (ASIC-10)



SCL Part No.

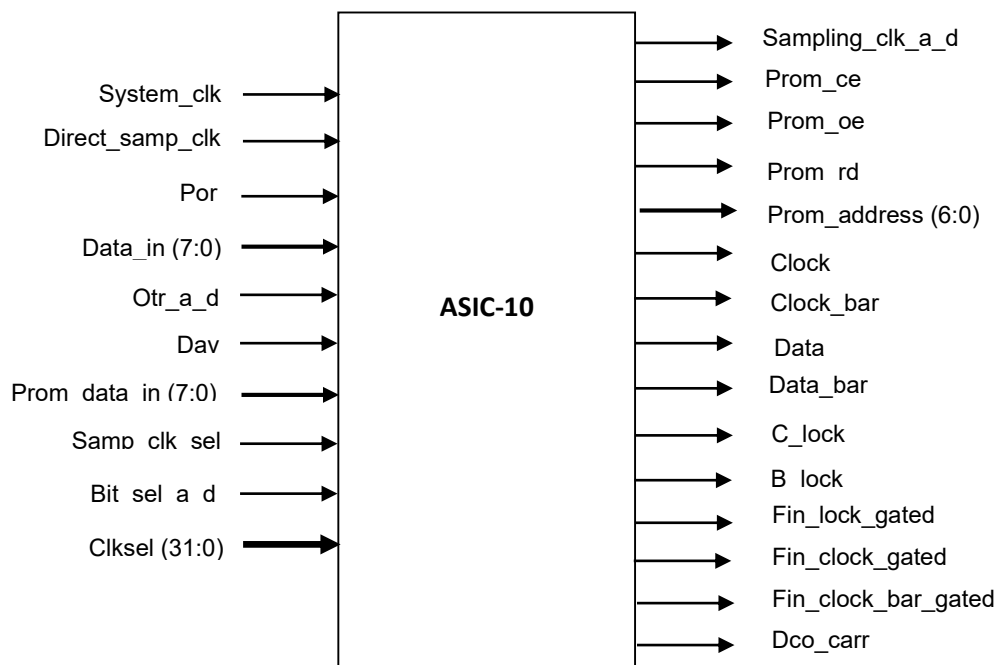
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PRODUCT DESCRIPTION:

ASIC-10 is a programmable digital BPSK demodulator & Bit synchronizer required in telecommand system to perform the function of demodulation and bit synchronization at data rates starting from 100 BPS to 16 Kbps. Digital Demodulator uses Costas Loop for demodulation and Bit Synchronizer uses In phase/ Mid Phase Shift Keying (also called as Data Transition Tracking Loop (DTTL)) algorithms. Binary Phase Shift Keying (BPSK), in terms of noise immunity per unit bandwidth, is one of the most efficient binary data modulation techniques. Figure below gives the block schematic of ASIC-10.

FEATURES:

- Single Supply Operation 5V±0.5V
- Operation Frequency 26.31 MHz
- Inputs can be left floating (pulled up internally)
- Quiescent Supply Current 5.3 mA
- Output loading 4 mA
- Operating Temperature -55°C to 125°C
- Testability Features: Scan and Functional
- Packaged in 132 Pins, CQFP
- SCL's 180nm CMOS Technology



Schematic Block of ASIC-10