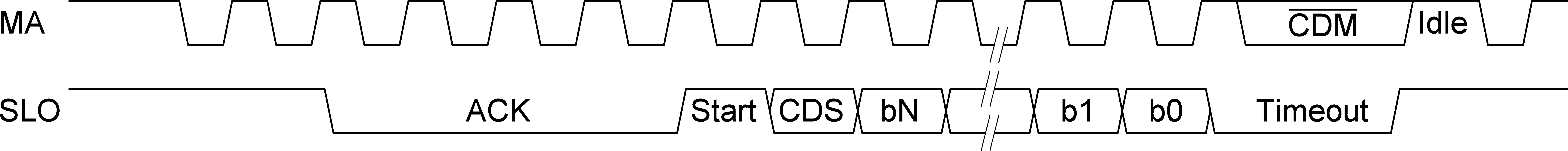
More information on BiSS protocols is available on the BiSS website: www.biss-interface.com

LENZ BISS C B3 – bidirectional point-to-point isochronous interface for fast acquiring angle data, read Electronic Data Sheet (EDS) and configure encoder.

MA – Clock pulse output of the BiSS C master;

SLO ­­­­­­­­­– Data output of the BiSS C slave;



Ack size – 4 TMA;

SCD size ­– 32 bits: b31…b0;

Position data size – 24 bits: b31…b8;

Error bit b7 – logic high when angle data is correct or not full initialized, logic low when rotor’s air gap too large;

Warning bit b6 – logic high when encoder is working fine and absolute position can recover on restart, otherwise – logic low;

CRC6 b5…b0 – the CRC polynomial for position, error and warning data is: x6 + x1 + x0, inverted.

Timing information

|  |  |  |  |
| --- | --- | --- | --- |
|  | Minimum | Typical | Maximum |
| MA clock frequency, 1/TMA, MHz | 0,1 |  | 12,5 |
| BISS timeout, us  – during SCD reading  – during register access | 12,6  13,5 | 12,9  14 | 13,2  14,5 |
| Delay MA → SL include slave, MA input and SLO output RS485 drivers delays, ns |  | 50 |  |
| Line delay due to cable length, MA + SLO, ns/m |  | 10 |  |
| Idle time, ns | 40 |  |  |
| SCD request rate, kHz  1/TMA = 12,5 MHz, Idle = 40 ns |  |  | 61,7 |