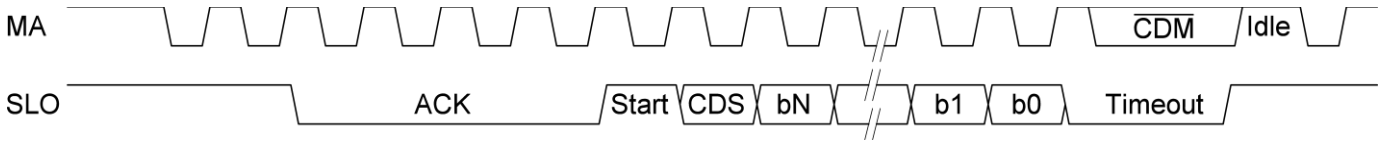
More information on BiSS protocols is available on the BiSS website: www.biss-interface.com

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 T_{MA};

SCD size – 32 bits: b31…b0;

Position data size – 24 bits: b31…b8;

Error bit b7 – logic high when angle data is valid or not fully initialized;

Warning bit b6 – logic low, when absolute position can't recover on restart or air gap too high;

CRC6 b5…b0 – the CRC polynomial for position, error and warning data is: $x^6 + x^1 + x^0$, start 0, output inverted.

Timing information

	Minimum	Typical	Maximum
MA clock frequency, $1/T_{MA}$, MHz	0.1		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	100		
SCD request rate, kHz $1/T_{MA}$ = 5 MHz, Idle = 100 ns			47.5

* Contact us for MA frequency up to 12.5 MHz