

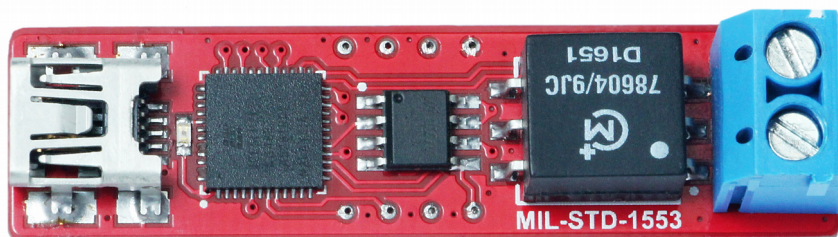


## MIL-STD-1553 Network Emulator

MIL1553NE

### Description

The MIL1553NE network emulator is a self-contained interface for generating MIL-STD-1553 data packets.



It simulates data transfers between a Bus Controller (BC) and multiple Remote Terminals (RT). The MIL1553NE is ideal for simulating bus activity without requiring access to a live MIL-STD-1553 network. The emulator generates BC-RT, RT-BC and RT-RT transfers using a range of fixed addresses, sub-addresses and word counts.

Simply apply 5V power (for example, from a USB port) and the unit will immediately start generating MIL-STD-1553 data packets. It acts as a Bus Controller, sending out packets and also acts as a Remote Terminal, receiving those packets and responding with a status message.

The differential output signal is transformer coupled, electrically isolating the emulator from the acquisition equipment.

A breathing LED provides operational status indication.

### Electrical characteristics

Parameter	Min	Typ	Max	Units
DC voltage supply (typically powered from a USB host port)	4.75	5.00	5.25	V
DC current requirement	7	10	12	mA
Differential output amplitude (no load)	10	14	16	V <sub>pp</sub>
RT response delay	-	6	-	us
Inter message gap (IMG)	-	100	-	us

### Command List

Direction	Command	Bus monitor
BC – RT	01 R 01 01	0821 <data> 0800
BC – RT	02 R 01 05	1025 <data> 1000
BC – RT	04 R 02 00 (32 data words)	2040 <data> 2000
RT – BC	05 T 03 04	2C64 2800 <data>
BC – RT	24 R 06 06	C0C6 <data> C000
RT – BC	01 T 02 08	0C48 0800 <data>
BC – RT	06 R 06 01	30C1 <data> 3000
RT – BC	25 T 01 07	CC27 C800 <data>
RT – RT	05 R 01 04 / 18 T 01 04	2824 9424 9000 <data> 2800