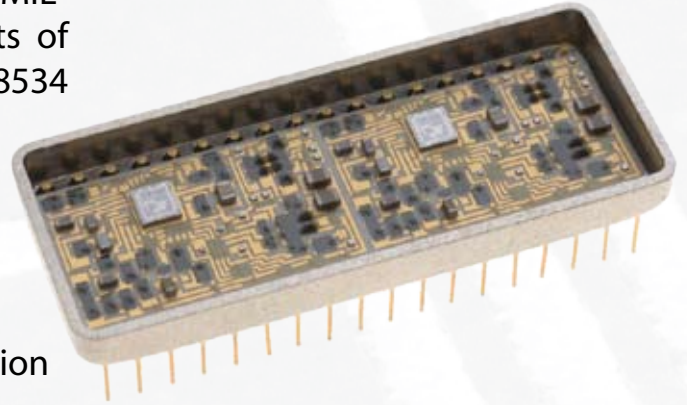




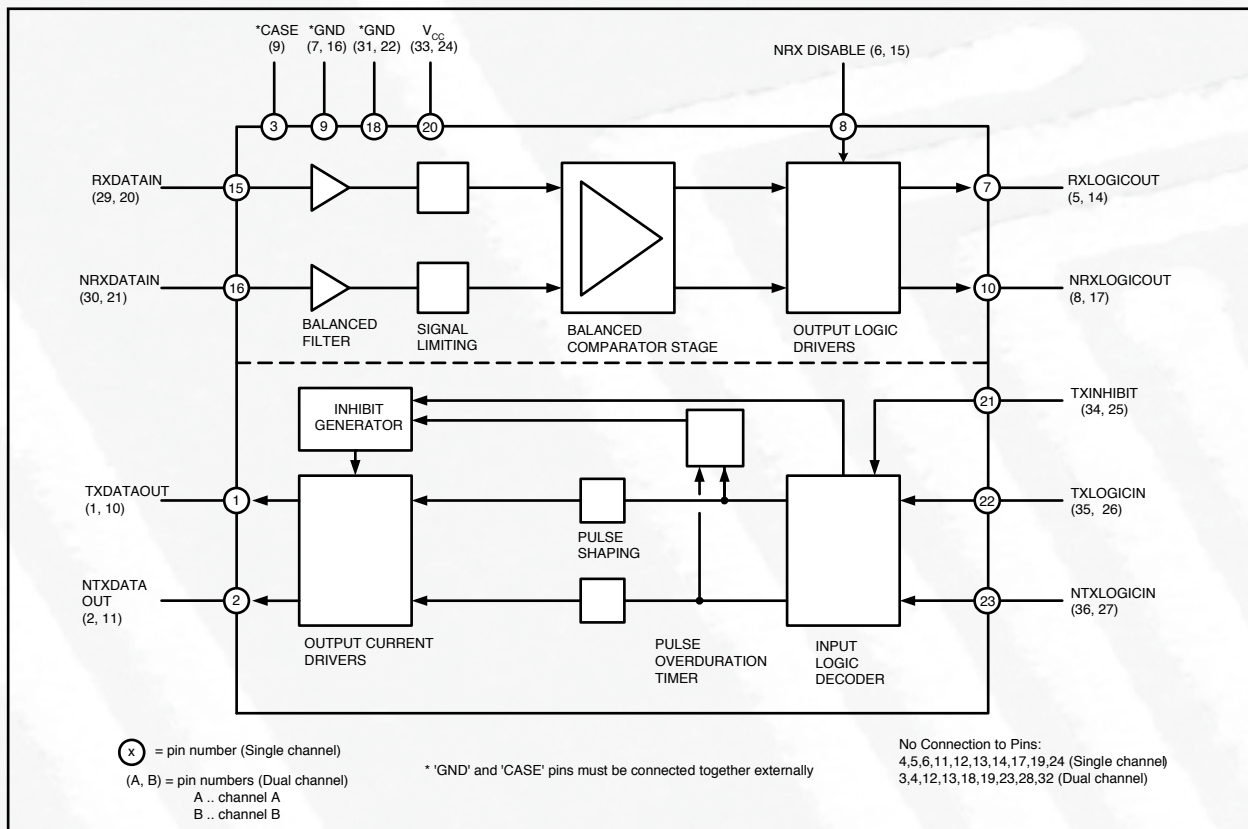
MicroTechnology

MIL-STD-1553 SINGLE AND DUAL-CHANNEL 5-VOLT TRANSCEIVERS FC15539 Series

The FC15539 is a complete data bus transmitter and receiver hybrid, driven from a single 5V supply (12V and 15V also available). The device conforms to MIL-STD-1553B, and is screened to the requirements of MIL-STD-883, BS9450 (CECC 63000) and MIL-PRF-38534 Class H (Military) or Class K (Space) as required.



- » Single rail operation
- » Low power dissipation
- » Third-order balanced receiver input filtering
- » Enhanced input logic tracking and fault protection
- » Short circuit protection of transmitter outputs
- » Available in DIL or flat-pack (surface mount)
- » Receiver output logic options for encoder/decoder compatibility
- » ITAR free - UK design and manufacture



Pin Configuration

Single Channel

Pin no.	Function
1	TXDATAOUT
2	NTXDATAOUT
3	CASE
4	n.c.
5	n.c.
6	n.c.
7	RXLOGICOUT
8	NRXDISABLE
9	GND
10	NRXLOGICOUT
11	n.c.
12	n.c.
13	n.c.
14	n.c.
15	RXDATAIN
16	NRXDATAIN
17	n.c.
18	GND
19	n.c.
20	V _{CC} (+5V)
21	TXINHIBIT
22	TXLOGICIN
23	NTXLOGICIN
24	n.c.

Dual Channel

Pin no.	Channel	Function	Pin no.	Channel	Function
1	1	TXDATAOUT	19	2	n.c.
2	1	NTXDATAOUT	20	2	RXDATAIN
3	1	n.c.	21	2	NRXDATAIN
4	1	n.c.	22	2	GND
5	1	RXLOGICOUT	23	2	n.c.
6	1	NRXDISABLE	24	2	V _{CC} (+5V)
7	1	GND	25	2	TXINHIBIT
8	1	NRXLOGICOUT	26	2	TXLOGICIN
9	1	CASE	27	2	NTXLOGICIN
10	2	TXDATAOUT	28	1	n.c.
11	2	NTXDATAOUT	29	1	RXDATAIN
12	2	n.c.	30	1	NRXDATAIN
13	2	n.c.	31	1	GND
14	2	RXLOGICOUT	32	1	n.c.
15	2	NRXDISABLE	33	1	V _{CC} (+5V)
16	2	GND	34	1	TXINHIBIT
17	2	NRXLOGICOUT	35	1	TXLOGICIN
18	2	n.c.	36	1	NTXLOGICIN

Selection Guide

Product No.	Options							
	Power Rail	Single Channel	Dual Channel	Receiver Output Options		Transformer Ratio (transceiver side: stub side)		Transformer Part No.
	+5V			Quiescent Low	Quiescent High	Isolation Transformer	Direct Coupling Transformer	
FC155391	x	x		x		0.67:1	0.47:1	FC1553TI (5V)
FC155392	x	x			x	0.67:1	0.47:1	FC1553TI (5V)
FC1553921	x		x	x		0.67:1	0.47:1	FC1553TI (5V)
FC1553922	x		x		x	0.67:1	0.47:1	FC1553TI (5V)
FC155393	x	x		x		0.57:1	0.40:1	FC1553TI (5VX)
FC155394	x	x			x	0.57:1	0.40:1	FC1553TI (5VX)
FC1553923	x		x	x		0.57:1	0.40:1	FC1553TI (5VX)
FC1553924	x		x		x	0.57:1	0.40:1	FC1553TI (5VX)

More detailed transformer and transceiver datasheets available on request.

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