

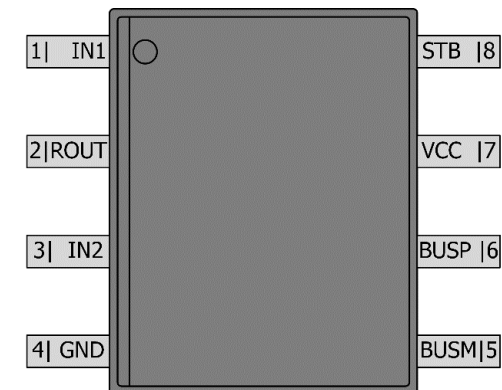
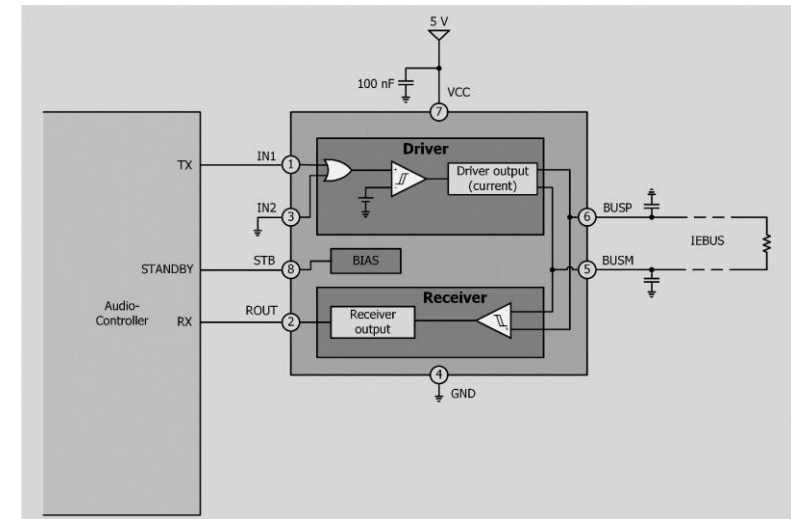
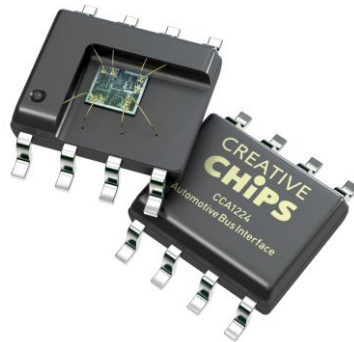
CCA1224 Bus Interface Driver – Receiver IC

DESCRIPTION

The CCA1224 is a bus interface IC with driver and receiver function. The bus driver provides two or combined inputs and a differential current bus output. The receiver uses the driver outputs as input and delivers the signal to an open collector output. This device is functional and pin compatible to the obsolete part no. HA12240. Typical applications are automotive audio equipment controllers.

FEATURES

- Two or combined data inputs (3.3 V and 5.0 V)
- Wide receiver common mode input range of 0 to 5V
- Hysteresis input comparator
- Current drive output typ. 3.8 mA
- Hysteresis comparator for receiver
- Open collector receiver output
- Operating VCC 5 V ±0.5 V
- Standby function (IVCC < 1 µA)
- ESD protection 2kV on all IO pins
- SOP8 package, automotive qualified (AECQ100)



ELECTRICAL CHARACTERISTICS (Ta=-40 – 105°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Supply Voltage	VCC		4.5	5	5.5	V
Supply Current	I _{VCC}		0.8		8.5	mA
Operating Temperature Range	Θ _{AMB}		-40		105	°C
Max. Bus Input Voltage	V _{BUS}				18	V
Driver output current (high level)	IOH	V1 or V3 > 2.1 V, BUSP out; BUSM in	3.1	3.8	4.5	mA
Driver delay time low -> high	T _{DDR}	V1 = 4.5 V ↑; V6 – V5 = 110 mV ↑;		80	130	ns
Receiver delay time low -> high	T _{RDR}	V6 – V5 = 110 mV ↑; V2 = 4.5 V ↑		600	700	ns
Receiver delay time high -> low	T _{RDF}	V6 – V5 = 30 mV ↓; V2 = 0.5 V ↓		110	150	ns

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