

SELECTION GUIDE

DATACOM: LIN, CAN AND RFID TRANSCEIVERS

Ants communicate in a unique manner, through pheromones - scented chemicals. They are detected at the tips of the ants' super sensitive antennae and tell the ant which way to turn with the varying pheromone strength.

Our Datacom products support modern LIN and CAN networks as well as RFID/NFC communications.

If a high level of flexibility is needed for in-vehicle networks based on LIN or CAN standards then our automotive-grade transceivers are a perfect fit. Affordable RFID and NFC communications require low-component count products, this is what our RFID transceiver and NFC sensor tag are made for.

LIN Transceivers Overview

Part Number	MLX80020	MLX80002	MLX80004	MLX80030	MLX80050	MLX80031	MLX80051
Function	LIN transceiver			LIN SBC			
LIN Channels	1	2	4	1	1	1	1
Supply Voltage	5 to 18V (26V)						
Output Voltage	n.a.	n.a.	n.a.	3.3V	5V	3.3V	5V
LDO Regulator	no	no	no	70mA max. output			
RESET Output	no	no	no	yes	yes	yes	yes
Window Watchdog	no	no	no	no	no	yes	yes
Package	SOIC8	QFN4x4 24L	QFN4x4 24L	SOIC8	SOIC8	QFN5x5 20L	QFN5x5 20L
LIN Spec	ISO17987 (LIN 2.x, J2602)						
Operating Temp.	-40 to 125°C						
Status & Tools	Production: PPAP AECQ-100 / EVBs and reference designs						

CAN Transceivers Overview

Part Number	TH8056		MLX80070		
Function	Single-wire CAN transceiver		CAN FD partial networking transceiver		
Max. Data Rate	40kbps		5Mbps		
Supply Voltage	5 to 26.5V		4.5 to 28V		
MCU Voltage	3.3 and 5V		2.85 to 5.5V		
Partial Networking	no		yes		
SPI	no		yes		
Bus Wake-up	no		yes		
Package	SOIC8	SOIC14	SOIC14	SOIC16	bare die (wafer)
INH Pin	no	yes	yes		
TX Enable Pin	no		no	yes	
CAN Specs	GMW3089, SAE J2411		ISO11898, SAE J2284		
Operating Temp.	-40 to 125°C		-40 to 150°C		-40 to 165°C
Status	Production		Samples		Production

RFID Transceiver

Part Number	MLX90109CDC	MLX90109EDC
Function	LF RFID Transceiver	
Max. Data Rate	4kbps	
Supply Voltage	3.1 to 5.5V	
Operating Frequency	100 to 150kHz	
Decoding	Biphase and Manchester	
Modulation	AM	
Package	SOIC8	
Operating Temp.	0 to 70°C	-40 to 85°C
Status	Production	

NFC Sensor Tag

Part Number	MLX90129
Function	NFC Sensor Tag/Transponder
Max. Data Rate	26kbps
Supply Voltage	2.0 to 5.5V
Operating Frequency	13.56MHz
NFC Forum	tag type 5
ISO Norm	ISO/IEC 15693
Signal Conditioning	PGA, DAC, ADC
Sensor I/F	4 inputs, 2 outputs
Communication I/F	NFC, SPI
Antenna tuning	integrated capacitor
Energy harvesting	yes (batteryless)
Temp. Sensor	integrated
Package	TSSOP20 and bare die
Operating Temp.	-40 to 105°C
Status	Production

