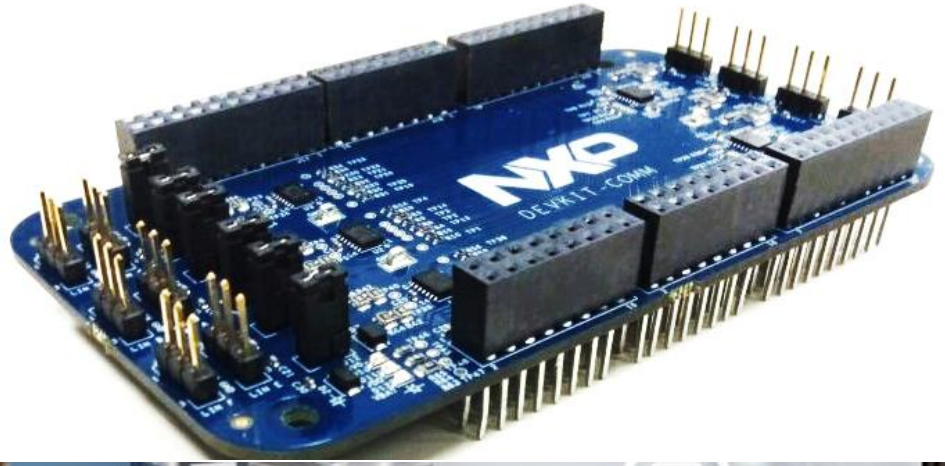
DEVKIT-COMM



EXTERNAL USE

SECURE CONNECTIONS
FOR A SMARTER WORLD

DEVKIT-COMM

TJA1022TK: Dual LIN 2.2A/SAE J2602 transceiver

The TJA1022 is a dual LIN transceiver that provides the interface between a Local Interconnect Network (LIN) master/slave protocol controller and the physical bus in a LIN network. It is primarily intended for in-vehicle subnetworks using baud rates up to 20 kBd and is compliant with LIN 2.0, LIN 2.1, LIN 2.2, LIN 2.2A and SAE J2602.

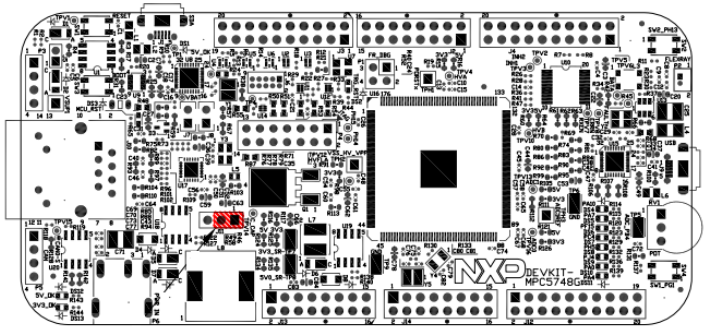
TJA1048TK: Dual high-speed CAN transceiver with Standby mode

The TJA1048 is a dual high-speed CAN transceiver that provides an interface between a Controller Area Network (CAN) protocol controller and the physical two-wire CAN bus. The transceiver is designed for high-speed CAN applications in the automotive industry, providing the differential transmit and receive capability to (a microcontroller with) a CAN protocol controller.

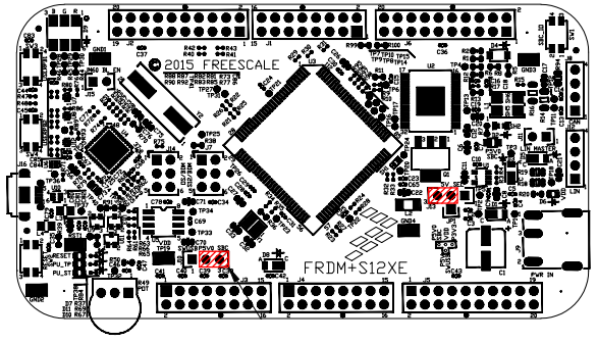
DEVKIT-COMM - Communications shield with multiple 4 CANs and 6 LINs

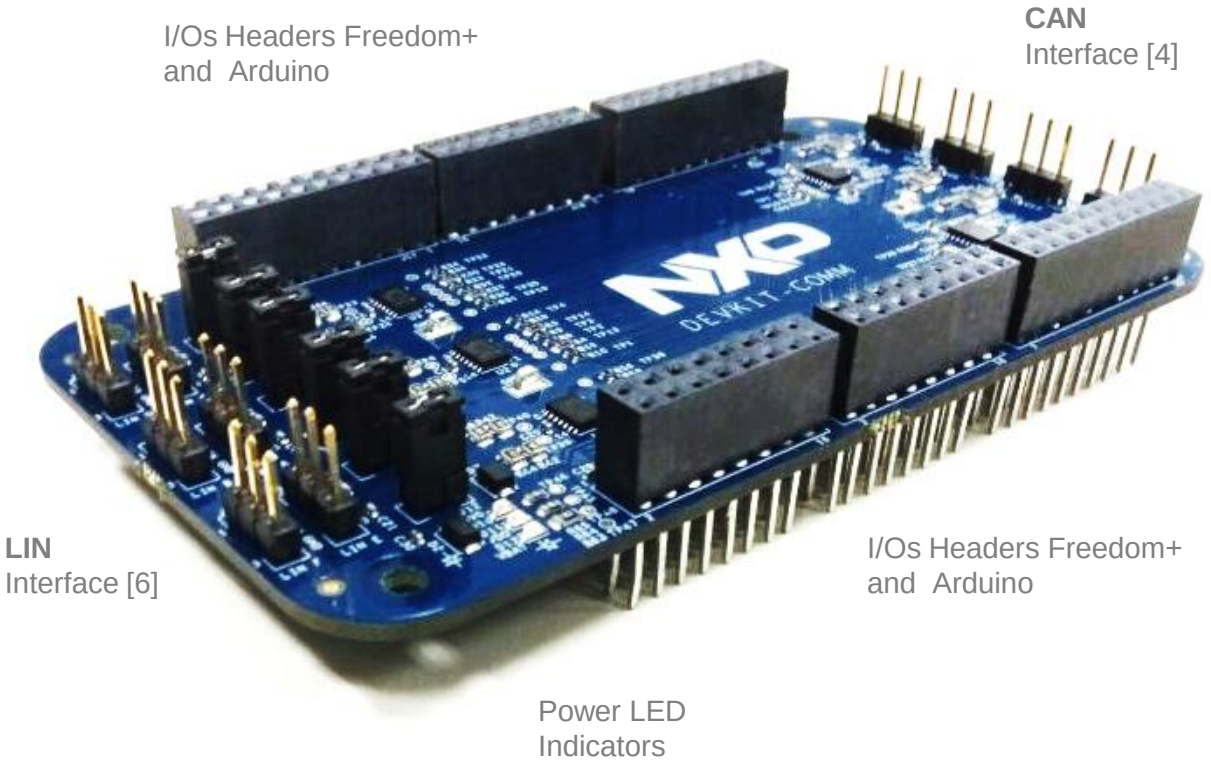
DEVKIT-COMM – Features and Compatibility

DEVKIT-MPC5748G



DEVKIT-S12XE

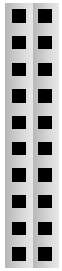




DEVKIT-COMM - I/O Headers Freedom+ and Arduino

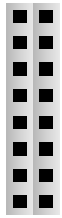
PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J3	SIGNAL	FUNCTION
2				
4				
6				
8				
10				
12				
14		PG6	TX_E	LIN Transmit Data Input
16		PG7	RX_E	LIN Receive Data Output
18	•	PG8	TXCAN_D	CAN Transmit Data Input
20	•	PG9	RXCAN_D	CAN Receive Data Output

J17



PIN	DEVKIT-S12XE	DEVKIT-MPC5748G	SIGNAL	FUNCTION
1				
3				
5				
7				
9				
11				
13				
15				
17				
19				

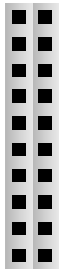
J18



PIN	DEVKIT-S12XE	DEVKIT-MPC5748G	SIGNAL	FUNCTION
2				
4				
6				
8				
10				
12				
14				
16				

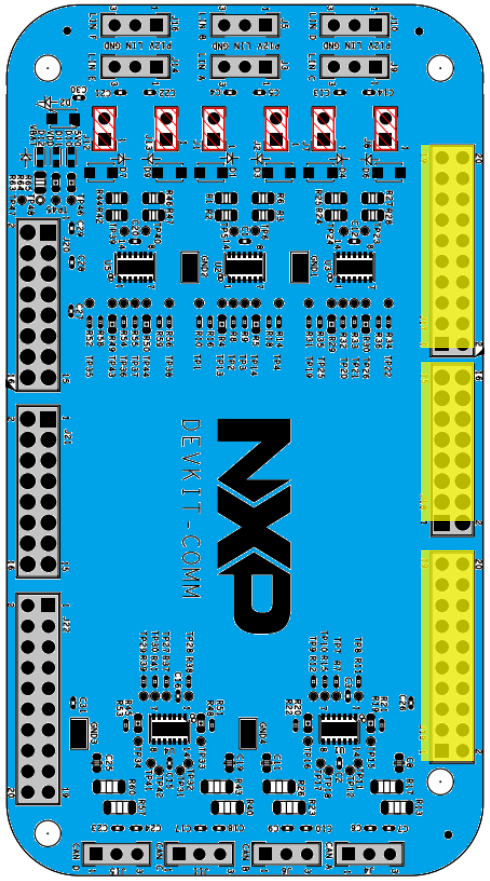
PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J2	SIGNAL	FUNCTION
1	•	PA6	RX_D	LIN Receive Data Output
3	•	PA5	TX_D	LIN Transmit Data Input
5				
7				
9				
11				
13				
15				

J19



PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J4	SIGNAL	FUNCTION
2				
4				
6	•	PC10	TXCAN_A	CAN Transmit Data Input
8	•	PC11	RXCAN_A	CAN Receive Data Output
10	•	PER_HVA	VDD	
12	•	GND	GND	
14	•	PE1	TXCAN_B	CAN Transmit Data Input
16	•	PE0	RXCAN_B	CAN Receive Data Output
18				
20				

PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J4	SIGNAL	FUNCTION
1				
3				
5				
7				
9	•	PI3	RX_A	LIN Receive Data Output
11	•	PI2	TX_A	LIN Transmit Data Input
13	•	PC7	RX_B	LIN Receive Data Output
15	•	PC6	TX_B	LIN Transmit Data Input
17	•	PF13	RX_C	LIN Receive Data Output
19	•	PF12	TX_C	LIN Transmit Data Input



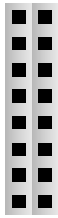
J17

J18

J19

DEVKIT-COMM - I/O Headers Freedom+ and Arduino

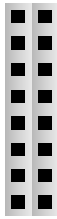
J20



PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J13	SIGNAL	FUNCTION
2		PF11	RX_F	LIN Receive Data Output
4		PF10	TX_F	LIN Transmit Data Input
6				
8				
10				
12				
14	•	PF8	TXCAN_C	CAN Transmit Data Input
16	•	PF9	RXCAN_C	CAN Receive Data Output

PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER J13	SIGNAL	FUNCTION
1	•	12V_IN	P12VIN	
3	•	PER_HVA	VDD	
5				
7				
9	•	5V0_SR	P5V0	
11	•	GND	GND	
13	•	GND	GND	
15	•	12V_IN	P12VIN	

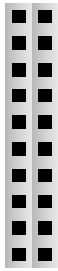
J21



PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G	SIGNAL	FUNCTION
2				
4				
6	•		LIN_SLP_F	LIN Sleep Control Input
8	•		LIN_SLP_E	LIN Sleep Control Input
10	•		LIN_SLP_D	LIN Sleep Control Input
12	•		LIN_SLP_C	LIN Sleep Control Input
14	•		LIN_SLP_B	LIN Sleep Control Input
16	•		LIN_SLP_A	LIN Sleep Control Input

PIN	DEVKIT-S12XE	DEVKIT-MPC5748G	SIGNAL	FUNCTION
1				
3				
5				
7				
9				
11				
13				
15				

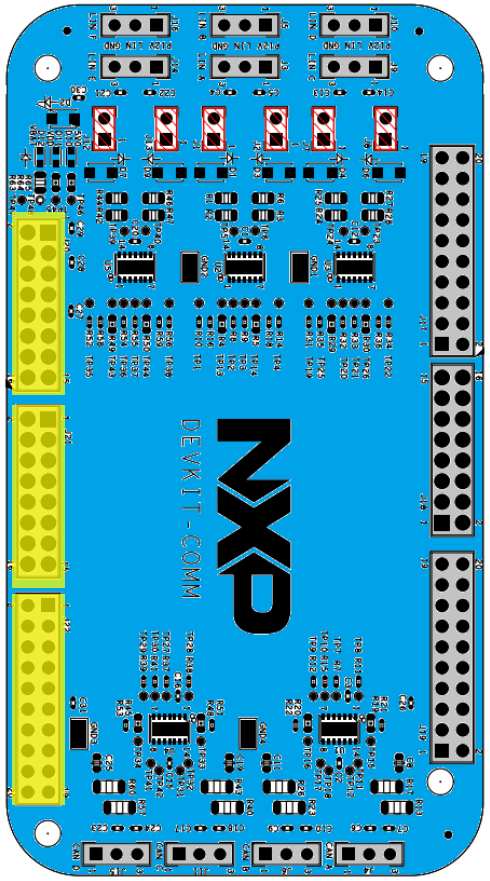
J22



PIN	DEVKIT-S12XE HEADER ??	DEVKIT-MPC5748G HEADER 12	SIGNAL	FUNCTION
2	•		CAN_STB_A	CAN Standby control input
4	•		CAN_STB_B	CAN Standby control input
6	•		CAN_STB_B	CAN Standby control input
8	•		CAN_STB_D	CAN Standby control input
10	•	PER_HVA	VDD	
12	•	GND	GND	
14				
16				
18				
20				

PIN	DEVKIT-S12XE	DEVKIT-MPC5748G	SIGNAL	FUNCTION
1				
3				
5				
7				
9				
11				
13				
15				
17				
19				

J20

J21

J22