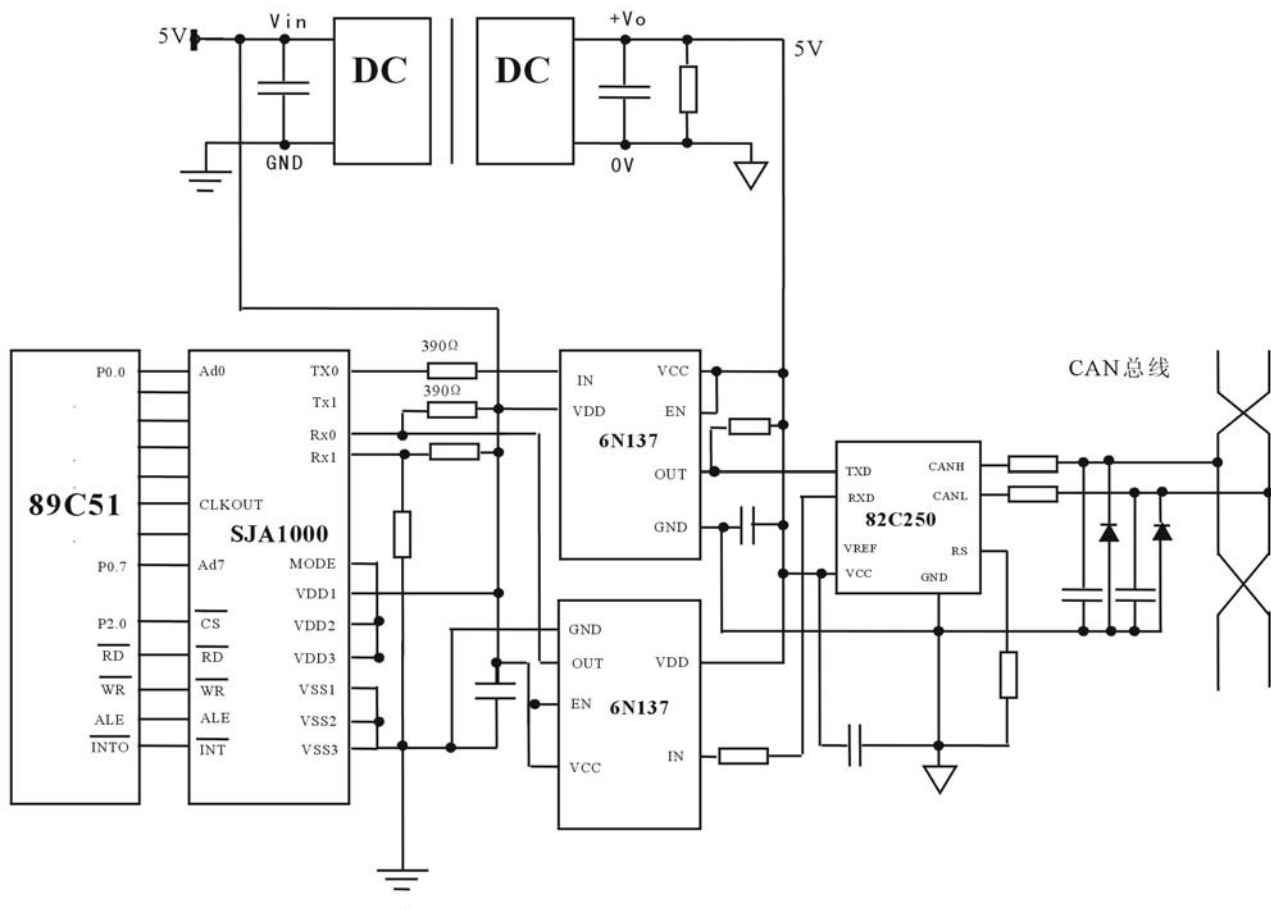


# CAN BUS SERIAL COMMUNICATION INTERFACE

## APPLICATION CIRCUIT



### FEATURES

- The schematic above is a part of CAN BUS serial communication interface. To increase the anti-EMI ability of the BUS nodes, in the circuit SJA1000's TXD and RXD didn't connect to 82C250's TXD and RXD. Rather it connected to 82C250 after passing 6N137. This realizes isolation perfectly between all nodes on the CAN BUS. Just be sure the two power of 6N137 Vcc and Vdd be isolated, otherwise the photocoupler losses its effectiveness.
- It is recommended that the isolation between Vcc and Vdd be DC-DC power modules because modules restrain surrounding EMI effectively, eliminate ground loop and protect the circuit system free interference from outside circuits.

## DC-DC POWER MODULE SELECTION GUIDE

SYSTEM POWER SUPPLY	ISOLATION VOLTAGE	GENERAL APPLICATION		REGULATED APPLICATION		LOW POWER CONSUMPTION	
		GENERAL DC-DC MODULES		HIGH STABILITY DC-DC MODULES		GERERAL DC-DC MODULES	
		PART NUMBER	PACKAGE	PART NUMBER	PACKAGE	PART NUMBER	PACKAGE
5VDC	1000VDC	B0505LS-1W	SIP	IB0505LS-W75	SIP	B0505LS-W25	SIP
		B0505LD-1W	DIP	IB0505LD-W75	DIP	B0505LD-W25	DIP
		B0505RN-1W	DCP01	IB0505T-W75	MINI SMD	B0505S-W25	DCP01
		B0505S-1W	MINI SIP	IB0505LT- W75	SMD	B0505D-W25	MINI SIP
		B0505D-1W	MINI DIP			B0505M-W25	MINI DIP
		B0505(X)T-1W	SMD			B0505T-W25	SMD
5VDC	3000VDC (2000VAC)	F0505S-1W	SIP	IF0505S-W75	SIP	F0505S-W25	SIP
		F0505D-1W	DIP	IF0505D-W75	DIP	F0505D-W25	DIP
		F0505M-1W	MINI SIP			F0505M-W25	MINI SIP
		F0505T-1W	SMD			F0505T-W25	SMD
5VDC	5200VDC (3500VAC)	FB0505S-1W	SIP				
		FB0505N-1W	DIP				
5VDC	6000VDC (4000VAC)	H0505S-1W	SIP				
		H0505D-1W	DIP				

NOTES:

9. Bxxxxx-xW is fixed input, isolated, unregulated single output series and IBxxxxx-xW is fixed input, isolated, regulated single out put series.
10. Fxxxxx-xw is fixed input, high-isolation, unregulated single output series and IFxxxxx-xW is fixed input, high-isolation, regulated single out put series.
11. B0505XD-1W is exactly compatible to Burr-Brown part DCP010505P (Pin to Pin compatible)
12. If the input voltage of system is 12V or 24V, just select the relevant DC-DC modules of same input voltage. Please see our website for details or contact us.

### REMARK:

Bxxxxx-1W is fixed input, isolated, unregulated single output series and IBxxxxx-1w is fixed input, isolated, regulated single out put series.

Fxxxxx-1w is fixed input, high-isolation, unregulated single output series and IFxxxxx-1w is fixed input, high-isolation, regulated single out put series.

B0505XD-1W is exactly compatible to Burr-Brown part DCP010505P (Pin to Pin compatible)

If the input voltage of system is 12V or 24V, just select the relevant DC-DC modules of same input voltage. Please see our website for details or contact us.

### ATTENTION:

- a. The capacitor C11 which attached to output of DC-DC modules could not be large, generally can not exceed 10uF, otherwise the modules may have problem while starting.
- b. The measurement to determine resistor R61 which attached to output of DC-DC modules can be: the power consumption of R2 should be 5% of the rated power of the module.
- c. Choose H Series (6000VDC) if the application requires higher isolation voltage.
- d. For special requirements please contact us:

Tel: (978)567-9610 or Fax: (978)567-9601

Website: <http://www.mornsunamerica.com>

E-mail: [sales@mornsunamerica.com](mailto:sales@mornsunamerica.com)