



CAN to UART Converter

(SWI-CAN-2211)

Features

- ✓ Supports both CAN 2.0A and CAN 2.0B protocols
 - ✓ Bridges CAN Bus and UART
 - ✓ Embedded with high performance CAN transceiver
 - ✓ Adjustable CAN Bit rates: 100 kbps to 1 Mbps
 - ✓ Can Provide command sets
 - Proprietary: for basic efficient data processing
 - Customized: for customer system Integration
 - ✓ Housing: (Optional)

- ✓ Dimension: 33.0 x 17.8 x 2.7 (mm)
 - ✓ Compliance with the automotive EMS test level: BCI (ISO 11452-4), EFT (IEC 61000-4-4), ESD (IEC 61000-4-2)
 - ✓ Technical support for your further applications:
 - Data Log
 - OBDII (Light Duty) decoder
 - J1939 (Heavy Duty) decoder
 - ✓ Easy to integrate with IOT devices:
BT, USB, 3G/4G, LoRa, NB IoT...
 - ✓ CAN be integrated with our Contactless CAN Probe (CCP)

Specification & Applications

Power supply	DC 7V ~ 35V
Working Current	< 12mA (1mA @Sleep mode)
Bit Rate (CAN)	125K, 250K, 500K, 1Mbps
Baud Rate (UART)	38400, 57600, 115200, 230400, 460800, 921600, 1382400 bps...
Support Protocol	CAN 2.0A / CAN 2.0B
Dimensions	33.0 x 17.8 x 2.7 (mm)
Weight	8g
Operation Temperature	-25 ~ +75 °C

- LD/HD Vehicle data access/log (OBDII/ J1939/ UDS) for ADAS devices
 - Industrial Automation (CANopen)
 - Farming Machine (ISO Bus)
 - Marine Electronics (NMEA2000)
 - Fleet Management System (FMS)

Frame Format - UART to CAN



	Start	AB	DLC	ID	CAN_Data	EOF
(29 Bytes/ASCII)	1	1	1	3/8	0~16	2
CAN 2.0A	@	A	8	7FF	1122334455667788	\r\n
CAN 2.0B	@	B	8	1FFFFFFF	1122334455667788	\r\n

- Start: 1 byte
- AB (i.e., CAN 2.0A or CAN2.0B): 1 byte
- DLC (Data Length Code): 1 byte
- ID: 3 Bytes or 8 bytes
- CAN_Data: 16 bytes
- End of Field (EOF): 2 bytes

Example

```
@A87FF1122334455667788\r\n
```

```
@A81FFFFFFF1122334455667788\n\r
```

Frame Format - CAN to UART



	Start	FT (space)	DLC (space)	ID	(space)	CAN_Data	EOF
(32 Bytes/ASCII)	1	1	1	1	8	1	16
CAN 2.0A	#	D	_	8	_	7FF	_
CAN 2.0B	#	D	_	8	_	1FFFFFFF	_

- **Start:** 1 byte
- **FT** (i.e., Data frame or RTR frame type): 1 bytes
 - “D” for data frame, “R” for remote transmission frame
- **DLC (Data Length Code):** 1 byte
- **ID:** 8 bytes
- **CAN_Data:** 16 bytes
- **End of Field (EOF):** 2 bytes

Example

```
#D 8      7FF 1122334455667788\r\n
```

```
#D 8 1FFFFFFF 1122334455667788\r\n
```