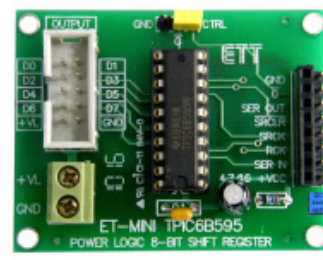


ET-MINI RTC DS3232

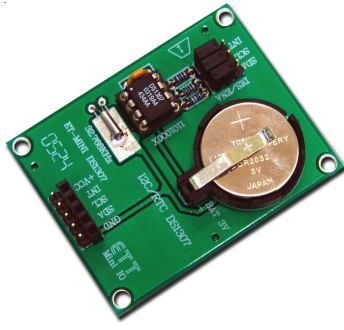
(P-ET-A-00460)



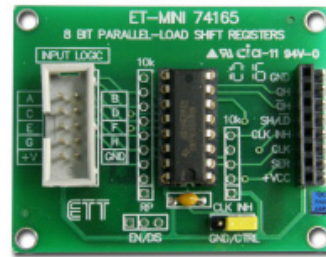
It is Circuit RTC in the format of I2C BUS that has CRYSTAL OSC inside; so, it is highly accurate to run other than RTC versions. It uses RTC No.DS3232; runs by 3V-5V, has 236 BYTE Internal RAM; with BATTERY 3V for Backup. It uses Connector 8PIN INPUT MALE and FEMALE.

ET-MINI TPIC6B595 (P-ET-A-00420)

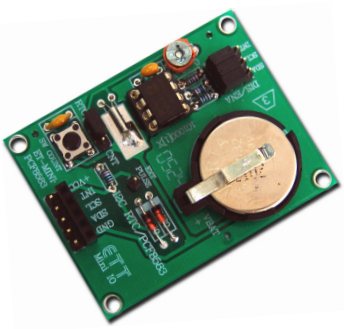
This is 8BIT POWER SHIFT REGISTER that is SERIAL-IN,PARALLEL-OUT for SPI Interface. It receives incoming data as serial type and it sends out data through OUTPUT as parallel type. OUTPUT in each bit is OPEN DRAIN type that supports the maximum Load Current at 500mA and the maximum Load Voltage at 50V/Connector V-OUT is TERMINAL 2PIN Type; Connector OUTPUT is 10PIN BLOCK type; Connector INPUT 8PIN HEADER MALE and FEMALE.

ET-MINI DS1307 (P-ET-A-00238)

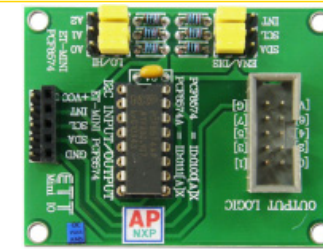
It is experiment of I²C BUS as RTC Circuit No. DS1307 size 8 PIN with Battery 3V for backup data in Port RTC, PORT INPUT 5 PIN MALE and FEMALE.

**ET-MINI 74165 (P-ET-A-00419)**

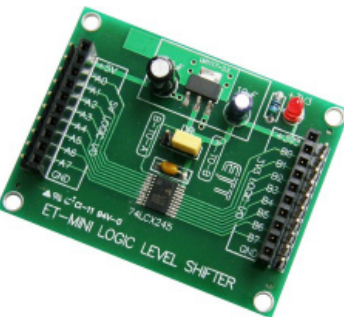
This is 8BIT SHIFT REGISTER PARALLEL-TO-SERIAL DATA CONVERSION that is PARALLEL-IN,SERIAL-OUT for SPI Interface. It receives incoming data as parallel type and it sends out data through OUTPUT as serial type. It supports the maximum CLOCK Frequency at 35 MHz. This board uses IC No.74LS165. Pin DATA IN is 10 PIN BLOCK Type; and PIN OUTPUT is 8PIN HEADER MALE and FEMALE.

ET-MINI PCF8583 (P-ET-A-00240)

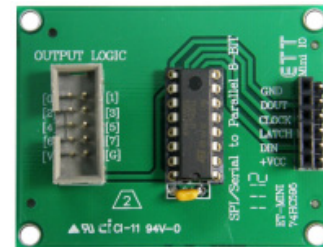
It is circuit of I²C BUS in RTC Type No.PCF8583 from PHILIPS CO, LTD.with Battery 3 V for Backup data in RTC and TACT SW. It makes RTC as Counter and Port INPUT signal as 5 PIN MALE/FEMALE.

ET-MINI PCF8574 (P-ET-A-00239)

It is experiment of I2C BUS in 8 Bit PORT circuit. Use IC No. PCF8574 with Jumper and select position of IC in I2C BUS System. Port INPUT 5 PIN MALE and FEMALE, PORT I/O 10 PIN BLOCK ETT.

ET-MINI LOGIC LEVEL (P-ET-A-00297)

It is Board circuit to connect signal Logic between 5V components and 3.3 V (or 3V) components and uses IC 74CX245 to be medium of connection. Moreover, there is circuit REGULATOR 3.3V on Board.

ET-MINI 74HC595 (P-ET-A-00241)

It is Circuit of TTL IC in Serial to Parallel Type and uses NO.74HC595 1 channel with 8 Bit OUTPUT Port 6 PIN MALE and Port 10 PIN BLOCK ETT FEMALE.

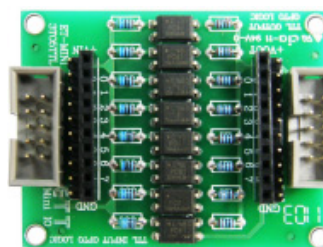
ET-MINI MCP4922 DAC 12 BIT

(P-ET-A-00305)

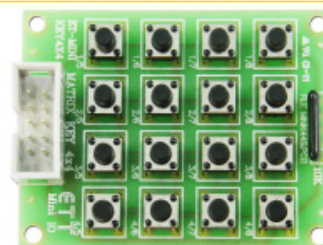


It is one of ET-MINI BOARD that is Circuit D TO A 12 BIT 2 CH and use IC No.MCP4922 from MICROCHIP.

- Use IC D TO A No.MCP4922 DIP TYPE 14 PIN
- 12 BIT OUTPUT 2 CHANNEL
- Can set Reference Voltage from VR that can be adjusted value from 0 to +VCC.
- SPI Interface and can be used with POWER SUPPLY range from 2.7 to 5.5V.

ET-MINI 3 TO 5 TTL (P-ET-A-00237)

It converts signal 3V into 5V 8 channel. It uses to connect between circuit or CPU that is signal 3V and can't connect with circuit 5V directly. It converts as OPTO ISOLATION and uses PC817 8 channel, PORT INPUT and OUTPUT 10 PIN BLOCK MALE.

ET-MINI KEY 4X4 (P-ET-A-00242)

It is KEY SW size 4 x 4(16 Characters) connect in Matrix Type and uses TACT SW size 5 x 5 mm. PORT of KEY SW is de signed in 10 PIN ET BOX HEADER.