

## PCA7758

Converter Board from 36-pin 0.5-mm-pitch QFN (36PJW-A) to 18-pin DIL Standard-Pitch (with LCC Socket and Pattern for Oscillator)

## User's Manual

### Keep safety first in your circuit designs!

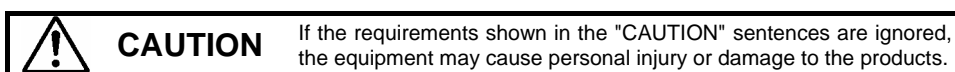
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## 1. Outline

The PCA7758 is a converter board from 36-pin 0.5-mm-pitch QFN (36PJW-A) to standard-pitch (2.54-mm). The pins correspond one-to-one.

## 2. Connecting the Oscillator Circuit Pattern

Take notice that the processing depends on whether or not the IC1 (oscillator module) is used.

### (1) When the IC1 (oscillator module) is used

Recommended oscillator module: SG-51P (Seiko Epson Corporation)

When using the IC1, the following processing is necessary (see (1) to (3) in Figure 1).

- (1) Supply VCC and GND.
- (2) Connect the OUT pin to the XIN pin.
- (3) Install a bypass capacitor at the C1.

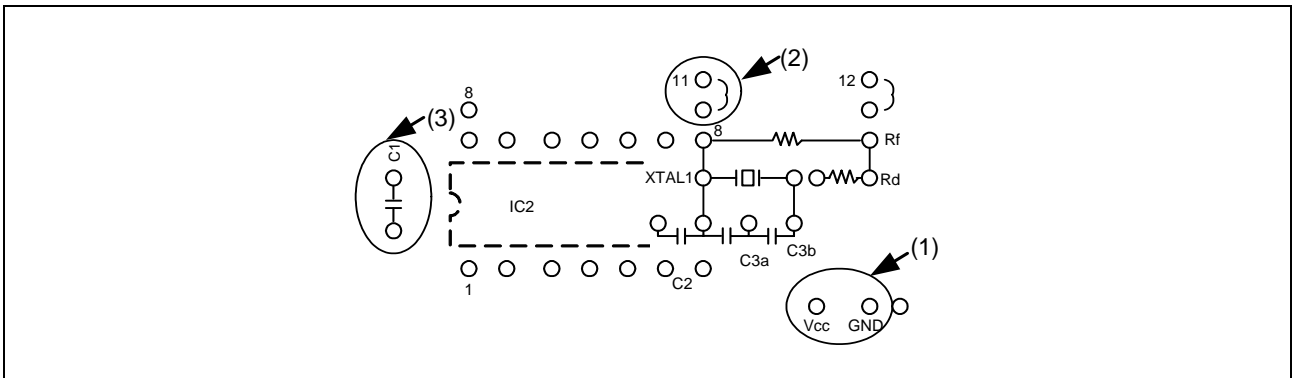


Figure 1 Connections when using the C1

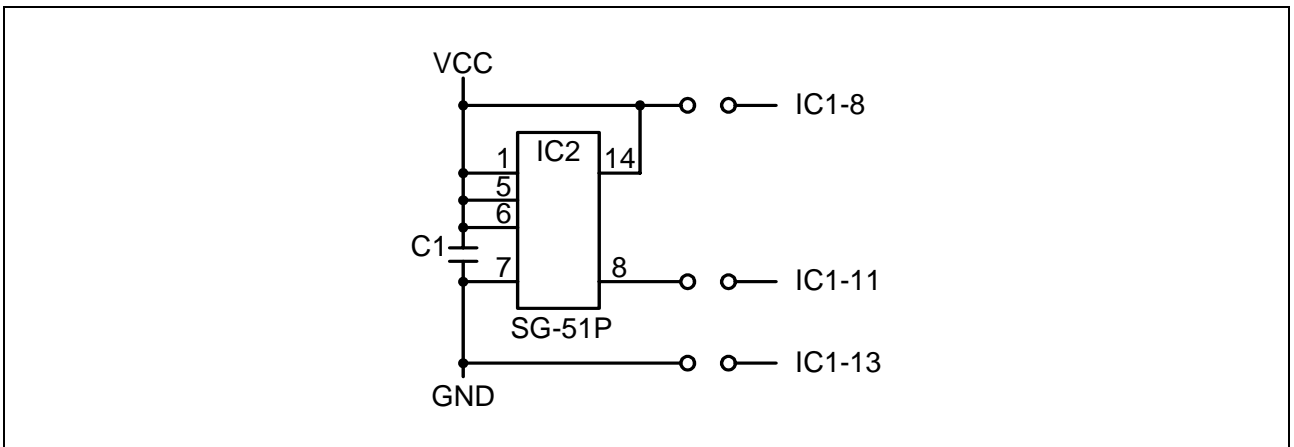


Figure 2 Connection diagram when using the C1

**(2) When using 2-pin type oscillator**

When using a 2-pin type oscillator, follow the procedure below (see (1) to (8) in Figure 3).

For the capacitor capacity and the resistance value, contact the capacitor distributor.

- (1) Install an oscillator at the XTAL1.
- (2) Install a capacitor at the C2.
- (3) Install a capacitor at the C3b.
- (4) Install a resistor at the Rd.
- (5) Install a resistor at the Rf.
- (6) Connect the XIN pin.
- (7) Connect the XOUT pin.
- (8) Connect the GND of the oscillator.

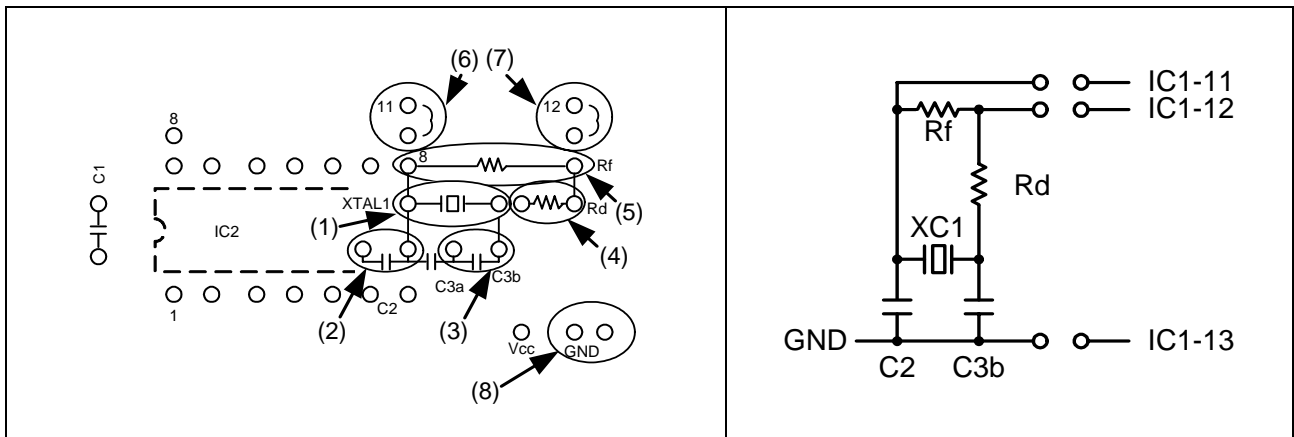


Figure 3 When using 2-pin type oscillator

**(3) When using 3-pin type oscillator**

When using a 3-pin type oscillator, follow the procedure below (see (1) to (6) in Figure 4).

For the capacitor capacity and the resistance value, contact the capacitor distributor.

- (1) Install capacitors at the C3a and C3b.
- (2) Install a resistor at the Rd.
- (3) Install a resistor at the Rf.
- (4) Connect the XIN pin.
- (5) Connect the XOUT pin.
- (6) Connect the GND of the oscillator.

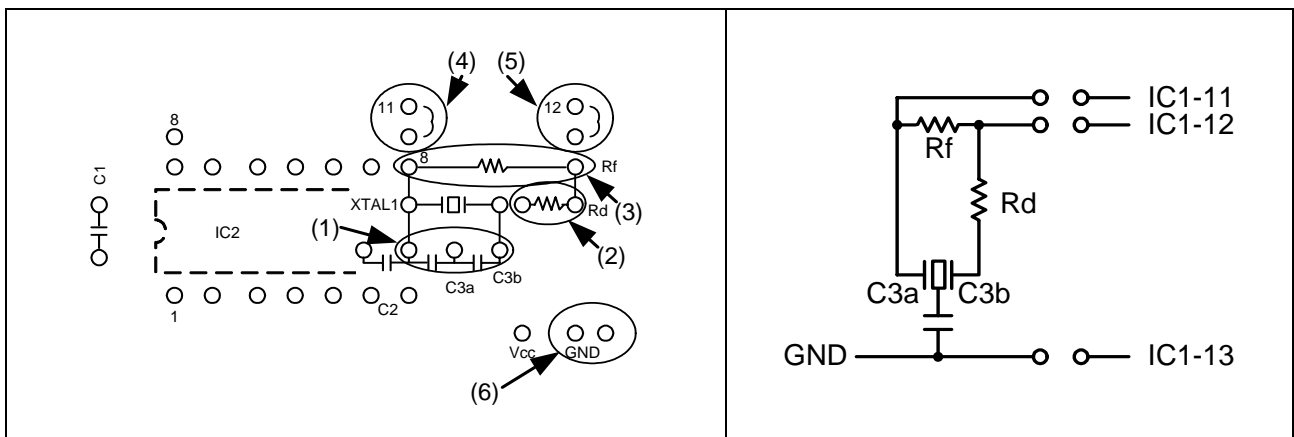


Figure 4 When using 3-pin type oscillator

### 3. External Dimensions

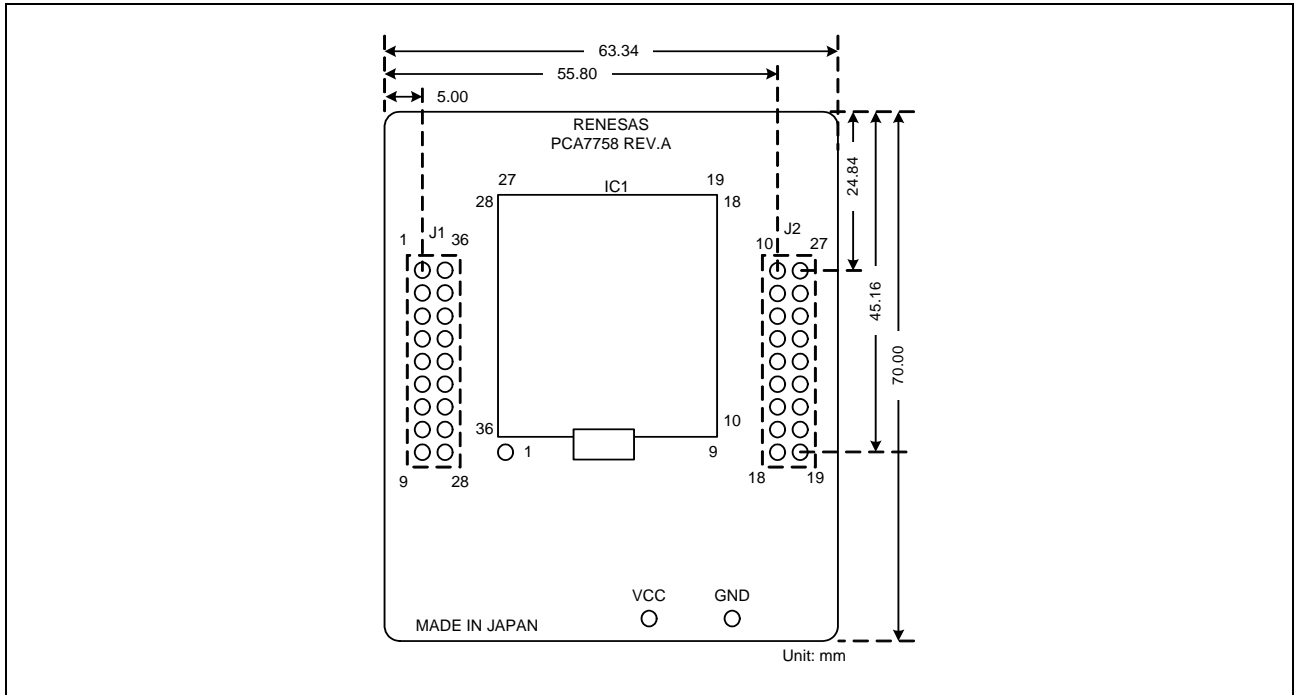


Figure 5 External dimensions of the PCA7758

### 4. Precautions

## IMPORTANT

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