

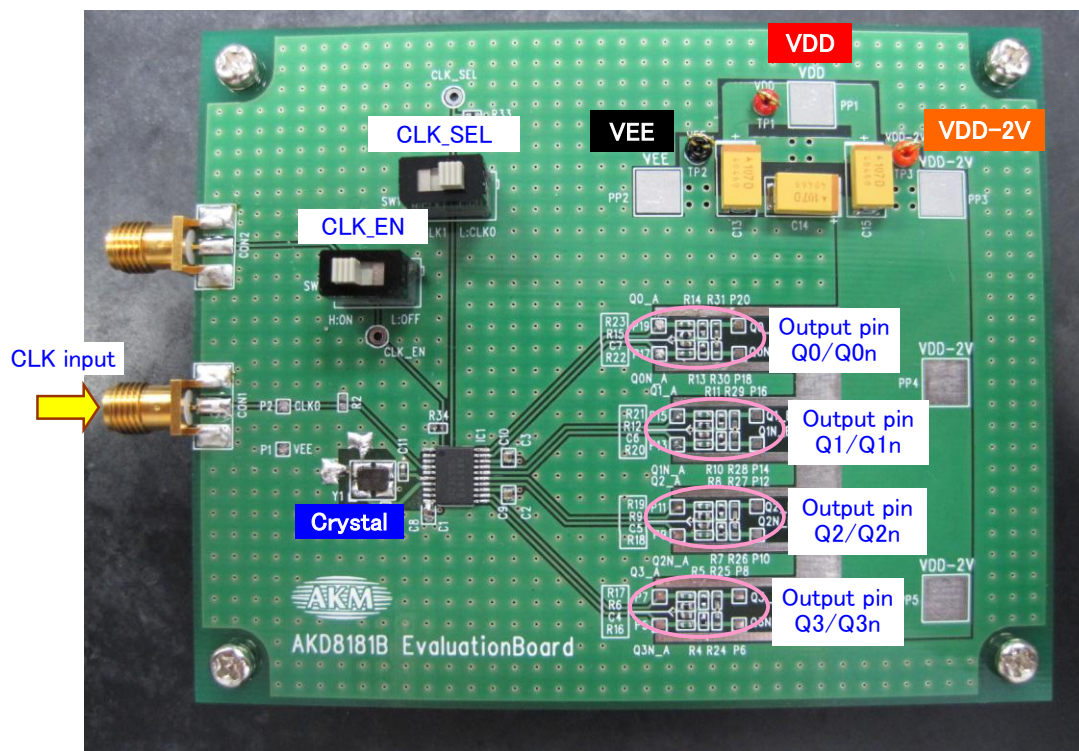


AKD8181B

AK8181B Evaluation Board

The AKD8181B is an evaluation board for AK8181B. Therefore, it is easy to evaluate DC/AC characteristics and confirm product functions.

- SMA terminal input
- Crystal can be mounted
- Enable to construct three types of output load circuit
- Preparing terminal and land pattern for VDD/VEE
- CLK_SEL and CLK_EN control switch



Power

There are the following three power supplies.

※If you have configured a termination circuit with resistor only (Pattern A or B), it becomes possible to evaluate even without applying power to the VDD-2V terminal.

- VDD The core power supply of AK8181B (3.3V)
- VEE The core power supply of AK8181B (GND)
- VDD-2V Power supply for the end of the output load resistor (=VDD-2V)

Note) GND of the SMA terminal is connected to the VEE inside the substrate.

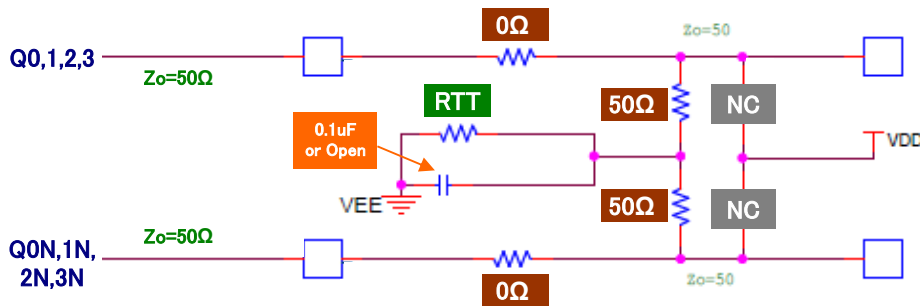
Clock input

AK8181B inputs the clock selected by CLK_SEL switch. (External input or crystal)
 The clock input signal can terminate at 50Ω if needed. (50Ω is connected to R2 pattern)
 Inputs 266MHz or less.

Output load circuit

It can terminate by the following three methods. (Pattern A/B/C)
 The state of initial shipment is **【Pattern A】**.

【Pattern A】 ※Composition at the time of shipment

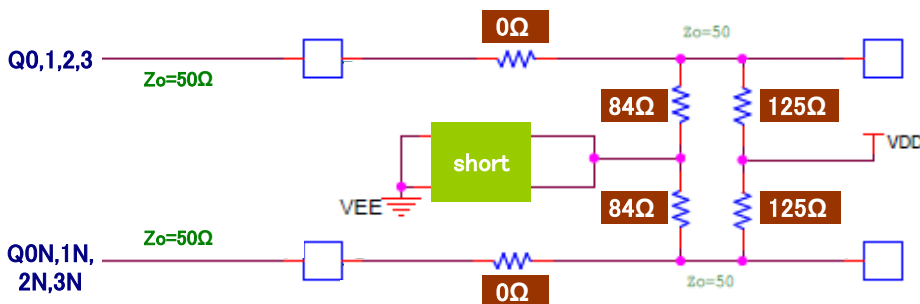


$$RTT = \left[\frac{1}{((V_{OH} + V_{OL}) / (V_{CC} - 2)) - 2} \right] Z_0$$

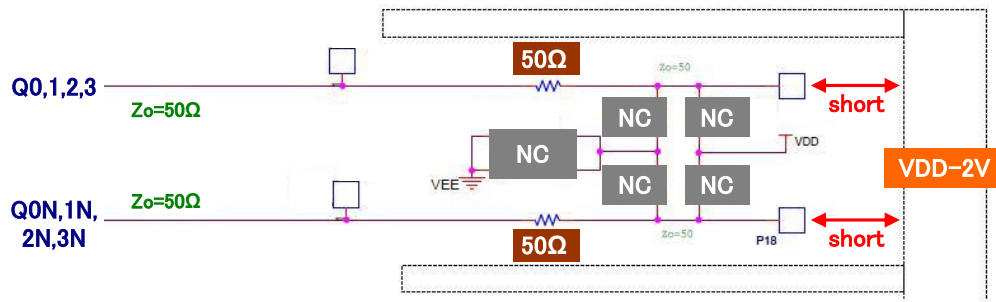
NC: No components

※RTT: 50Ω is mounted at the time of shipment

【Pattern B】

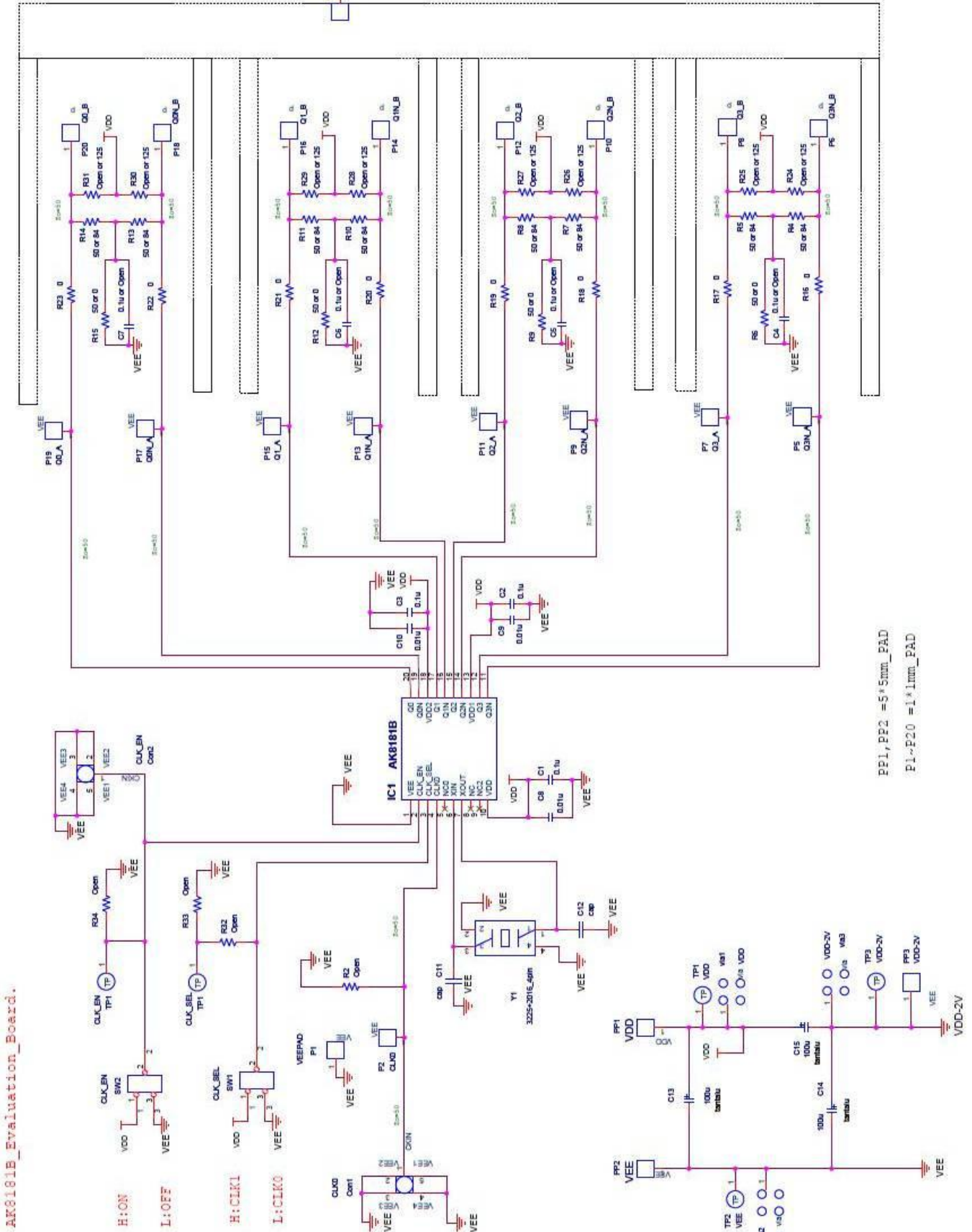


【Pattern C】



※Please impress a power to VDD-2V terminal.

According to the circumstances, please set up the output load circuit of Q0/0N, Q1/1N, Q2/2N and Q3/3N.
 The state of initial shipment is **【Pattern A】**.
 (Refer to the "Output load circuit" at page 2.)



PP1, PP2 = 5*5mm_PAD
 P1~P20 = 1*1mm_PAD