



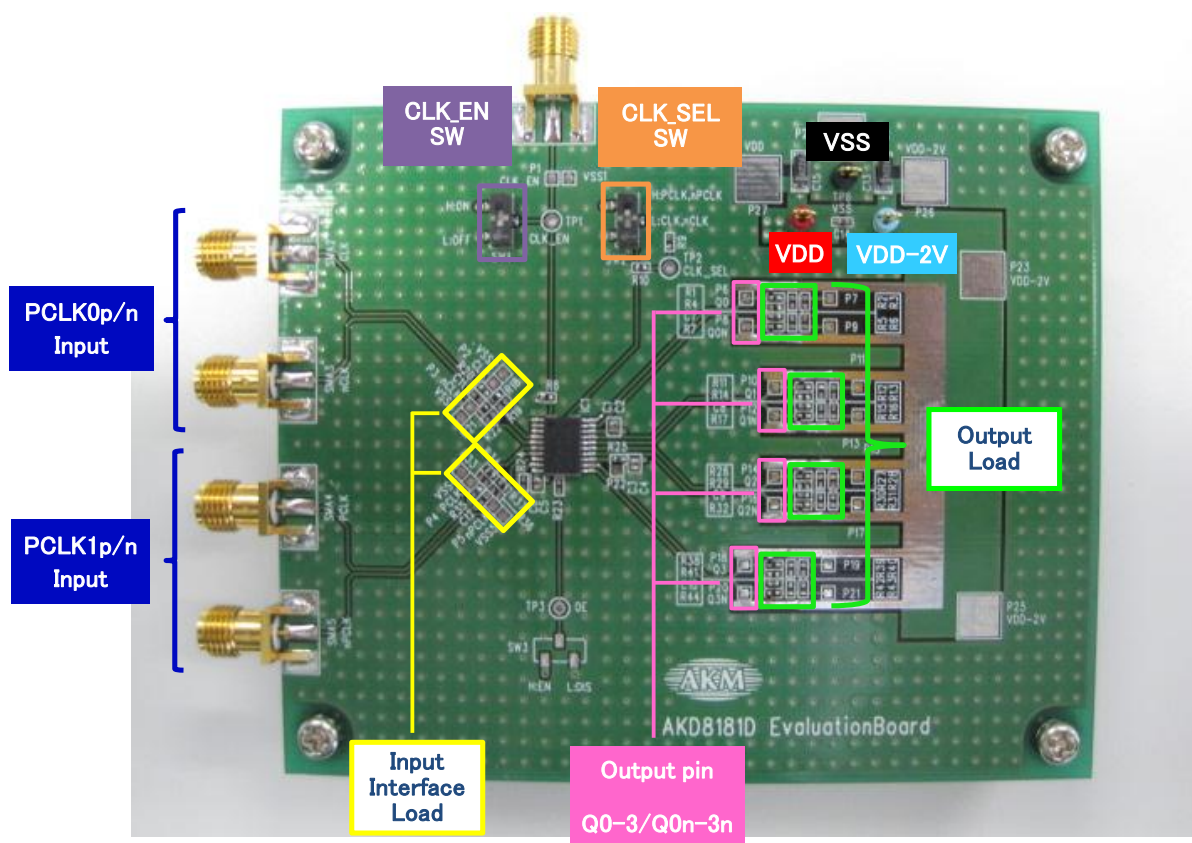
AKD8181D

AK8181D Evaluation Board

There are the fol
 ※If you have co

The AKD8181D is an evaluation board for AK8181D. Therefore, it is easy to evaluate DC/AC characteristics and confirm product functions.

- SMA terminal of the differential input
- Enable to construct input load circuit for interface
- Enable to construct three types of output load circuit
- Preparing terminal and land pattern for VDD/VSS/VDD-2V
- 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 B or C), it becomes possible to evaluate even without applying power to the VDD-2V terminal.

- VDD The core power supply of AK8181D (3.3V)
- VSS The core power supply of AK8181D (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 VSS inside the substrate.

Clock input

AK8181D inputs the clock selected by CLK_SEL switch. (Differential input or LVPECL)

The clock input signal can terminate if needed.

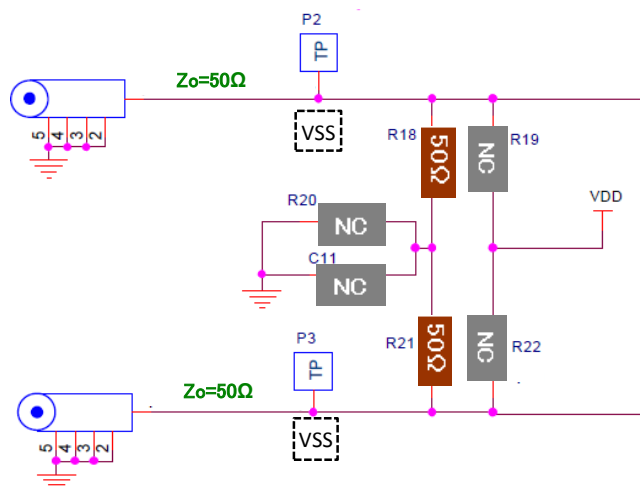
Input load circuit for interface

It can construct interface load circuit for input differential clock.

Examples are shown below.

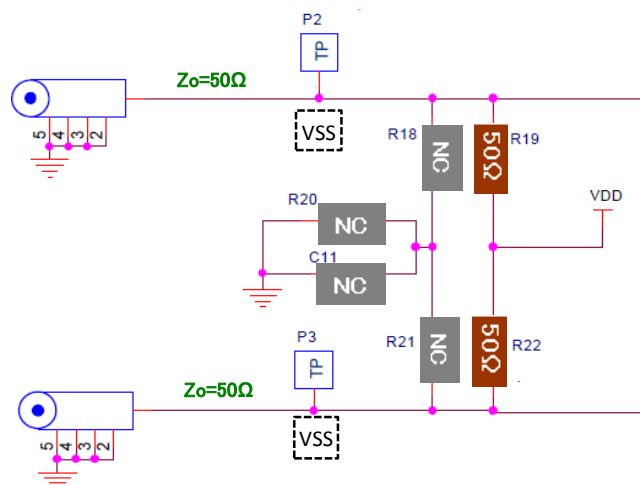
The state of initial shipment is **【Pattern c】**.

Pattern a

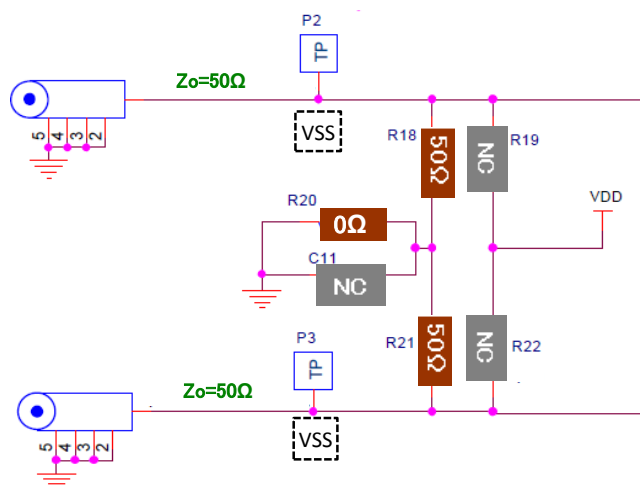


NC: No components

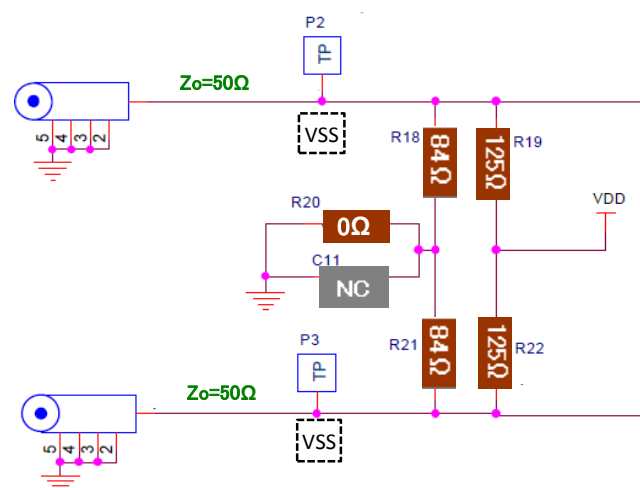
Pattern b



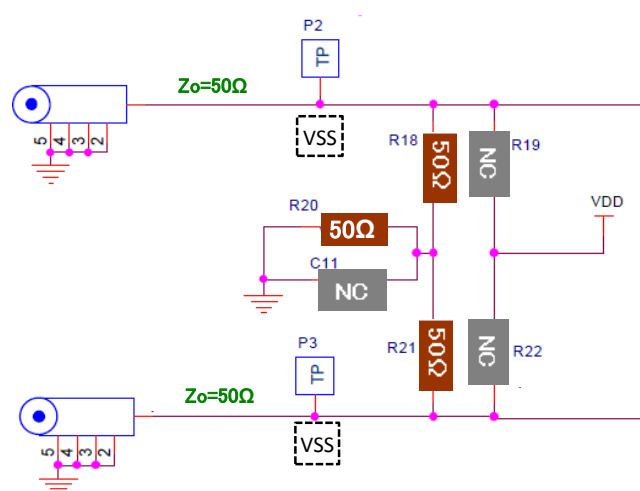
Pattern c



Pattern d

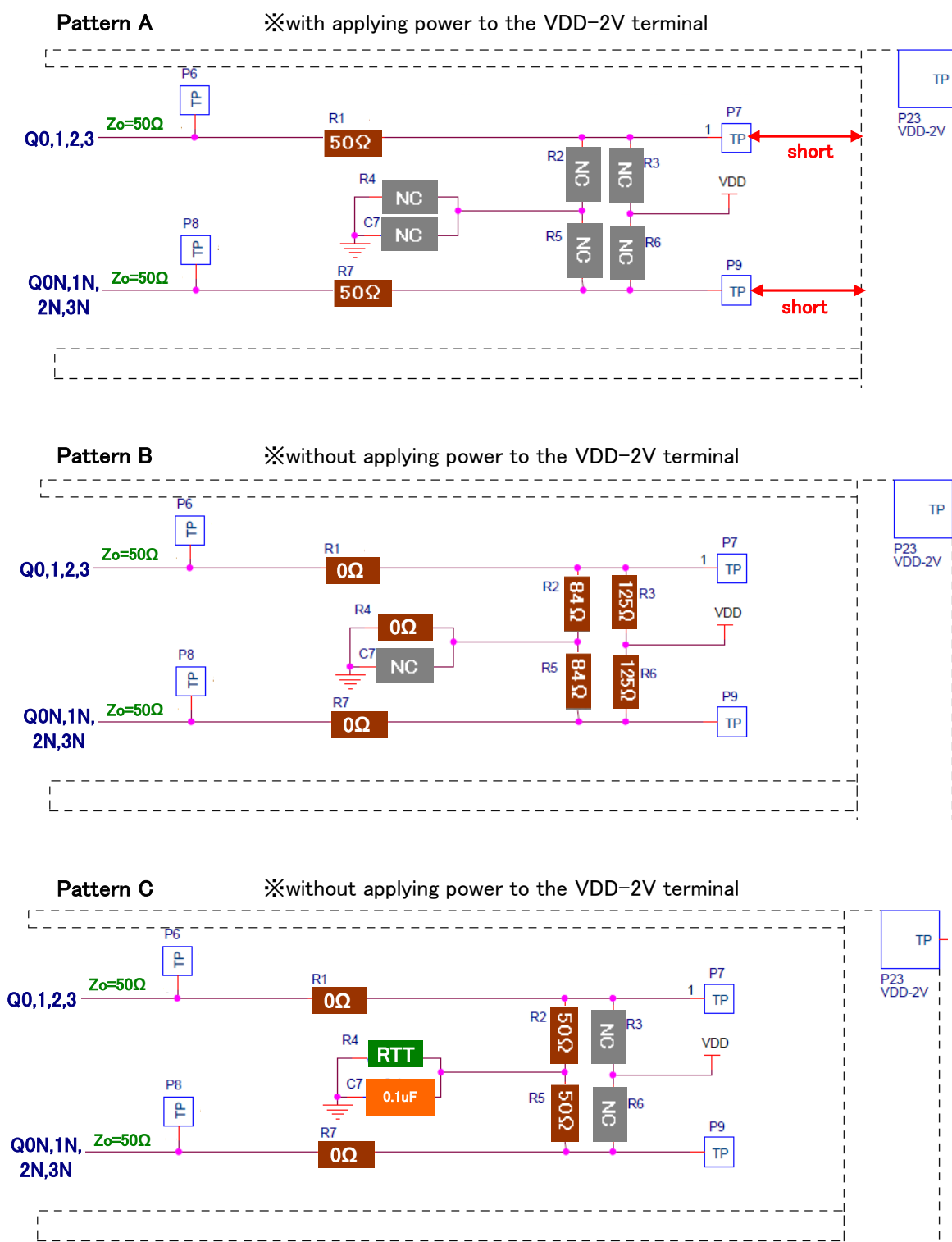


Pattern e



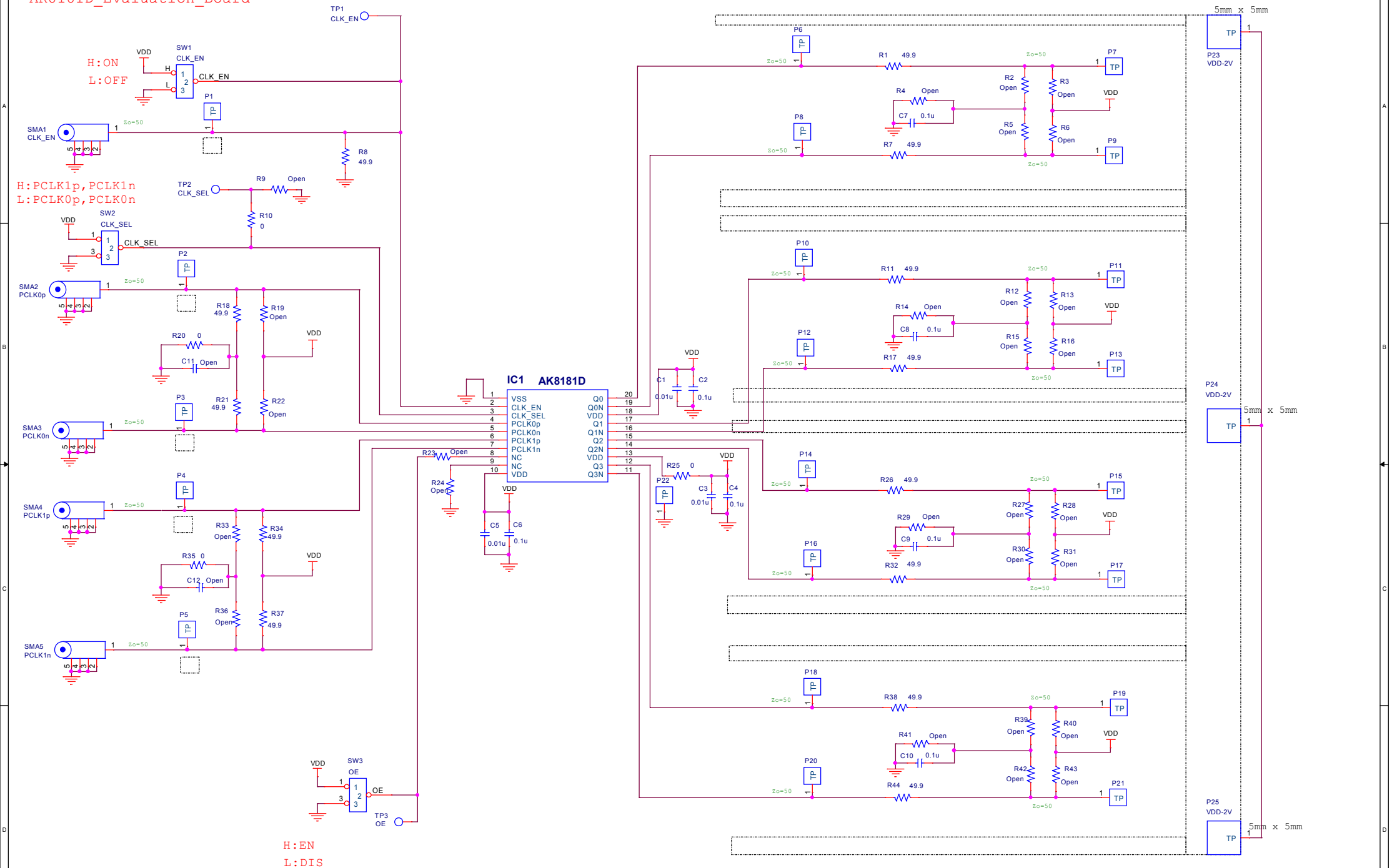
Output load circuit

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

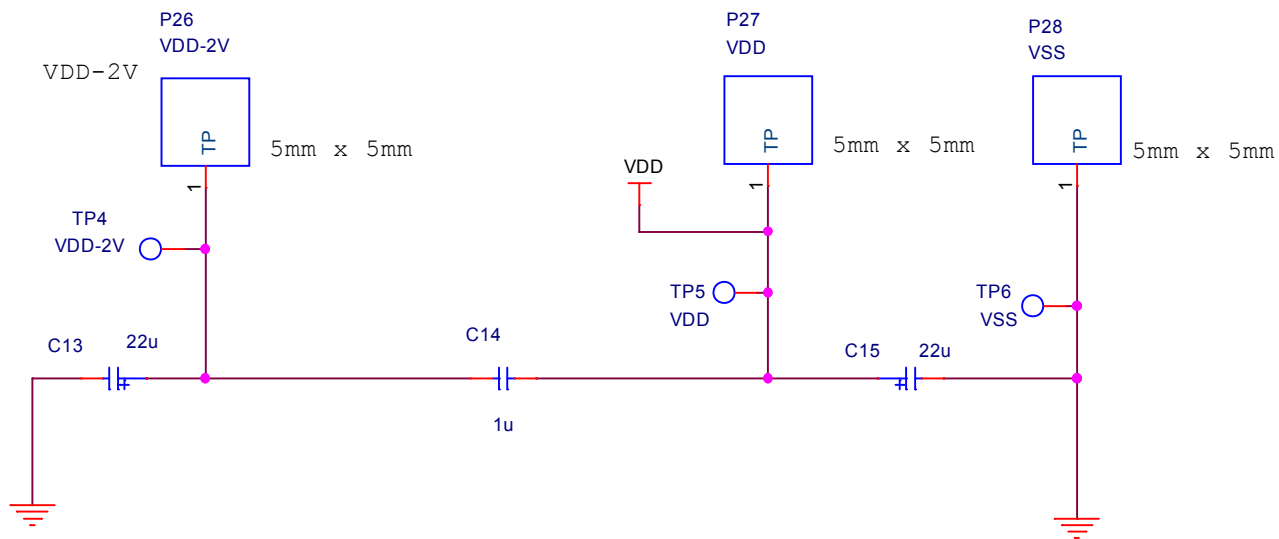


$$\text{※ } R_{TT} = \left[\frac{1}{((V_{OH} + V_{OL}) / (VDD - 2))} \right] Z_0$$

AK8181D_Evaluation_Board



Title		
AK8181D_Evaluation_Board		
Size	Document Number	Rev
A3	AK8181D	1.0
Date:	Tuesday, February 26, 2013	Sheet 1 of 2



Title			
AK8181D_Evaluation_Board			
Size A	Document Number Power		Rev 1.0
Date:	Monday, December 03, 2012	Sheet	2 of 2