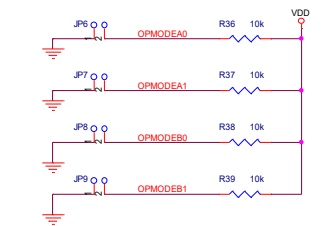


Title			
PIC49003A Application Schematic			
Size	Document	Number	Rev
B	Diodes Inc.	Clock IC application engineering	1.0
Date:	Friday, March 29, 2024	Sheet	1 of 1

**App Note:**

1. Each VDD pin needs 0.1u +1uF decoupling close to pin.
2. VDD uses small R=1-2 ohm or FB(ferrite bead)+10uF filtering for better DC/DC ripple noise rejection
3. This is HCSL type output: Place 33ohm serial and 50 ohm pull down <250mil close to iC output pins on comp. side.
4. LVPECL Output: Place 150ohm pull-down in comp. side close to pin <=300mil. HCSL Output: Place serial 33 ohm and 50ohm pull-down in comp. side close to pin <=300mil.
5. Suggest to use DC coupling in LVPECL/LVDS drive input clock with 100ohm cross at input pins <200mil; HCSL drive input clock without 100 ohm cross at input pins.
6. when in AC input drive either just use 100ohm cross to bias balance
7. Leave unused 156.25M\_Qx+ and 156.25M\_Qx- open
8. IREF pin: A 475 ohm resistor to GND.

**SOURCE\_OE:**  
Set SOURCE\_OE logic in R5/JP5 :  
0: Disable the internal clock  
1: Enable



**Output mode selection:**

OPMODE_A/B[1]	OPMODE_A/B[0]	OUTPUTMODE A/B BANK
0	0	LVPECL
0	1	LVDS
1	0	HCSL
1	1	Hi-2