

ICS527-01/02 Demo Board

The ICS527-01/02 demo board provides a way to quickly evaluate the performance of the ICS525-01 or ICS527-02 Clock Slicer User Configurable PECL Input Zero Delay Buffer.

Power

Connect 3.3 across the VDD and GND header pins.

Frequency Selection

The output frequency can be changed by setting switches SW1 and SW2 according to the instructions in datasheet. Alternatively, shunts can be soldered to the appropriate 0604 device landings underneath the SWs. Turning on a switch or stuffing a shunt will pull that particular input low. Opening the switch or removing the shunt will allow the on-chip pull-up resistors to take the signal high.

Devices Supported

The ICS527-01/02 Demo Board supports either an ICS527-01 (CLK in, CLK out) or a ICS527-02 (PECL in, CLK out) device. ICS527-02 specific signal names are printed in lower case. All other silk-screen labels are either common to both devices or are specific to the ICS527-01.

Component	ICS527-01	ICS527-02
CN1	open	SMA Connector
R1	open	68 ohm
R3	short	open
R4	open	180 ohm
R6	open	68 ohm
R8	open	open
R9	50 ohm	180 ohm
R11	open	short
R12	short	open
R13	short	open

Feedback Selection

The ICS527-01/02 Demo Board supports feedback from either CLK1 or CLK2. For off-board feedback, also connect the feedback signal to the resistor pad shared between R7 and R10

Component	CLK1 Feedback	CLK2 Feedback	Off-board Feedback
R7	short	open	open
R10	open	short	open

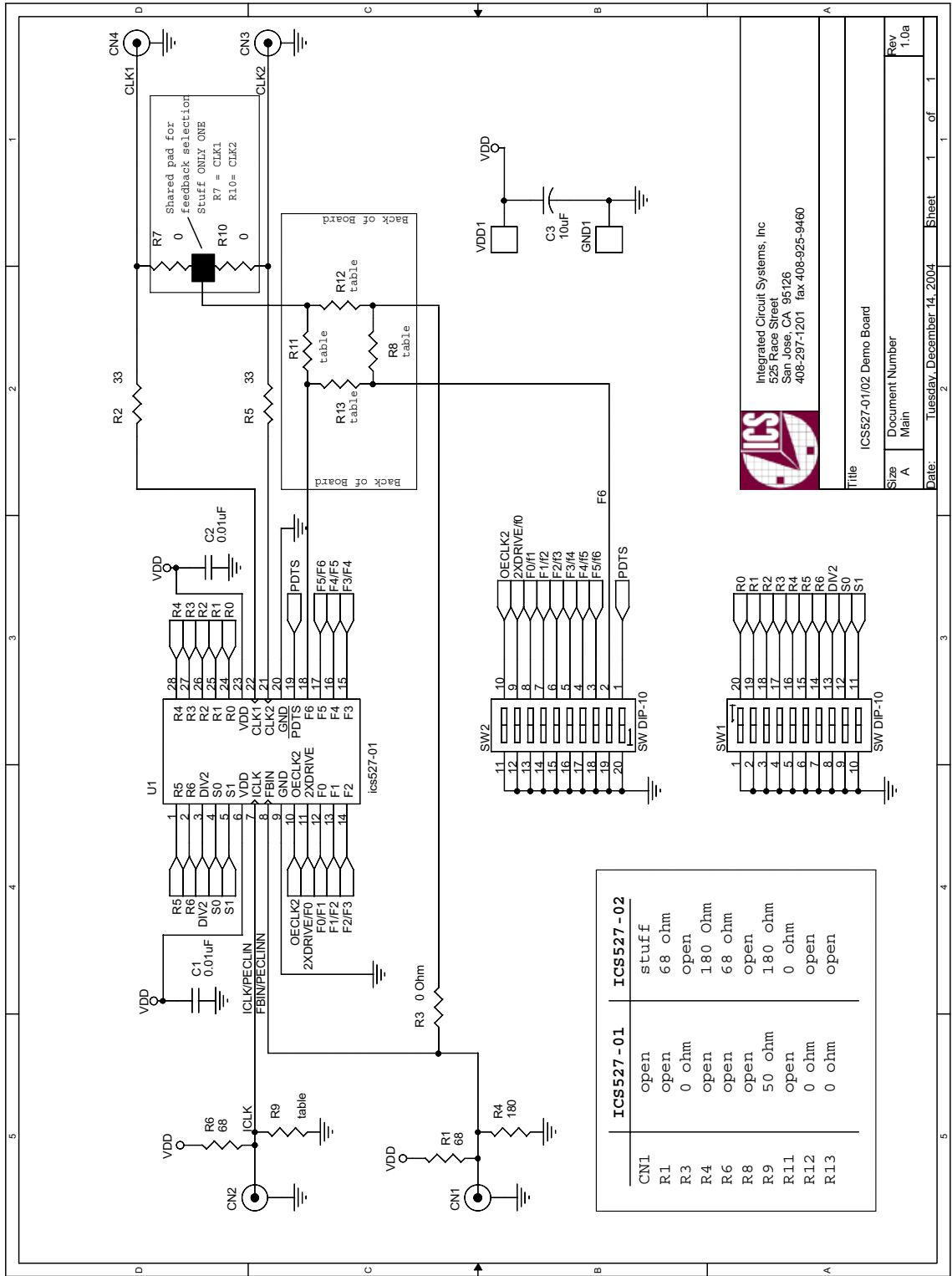
Output Termination

The R2 and R5 resistors serve as series termination resistors.

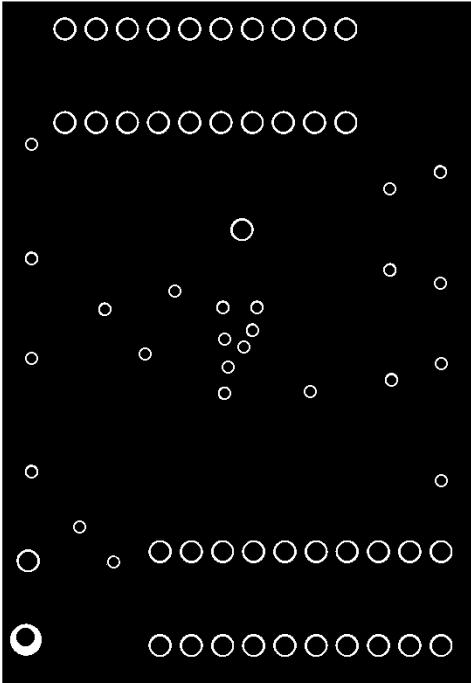
Trace Impedance

The ICS527-01/02 board has controlled impedance traces of 50 ohms for all clock inputs and outputs.

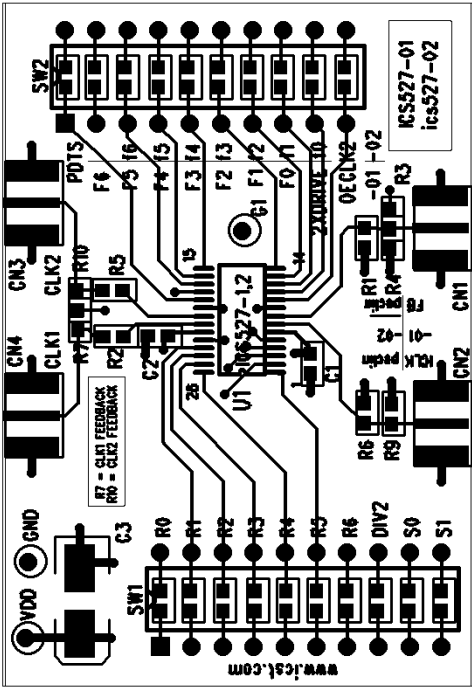
Demo Board Schematics



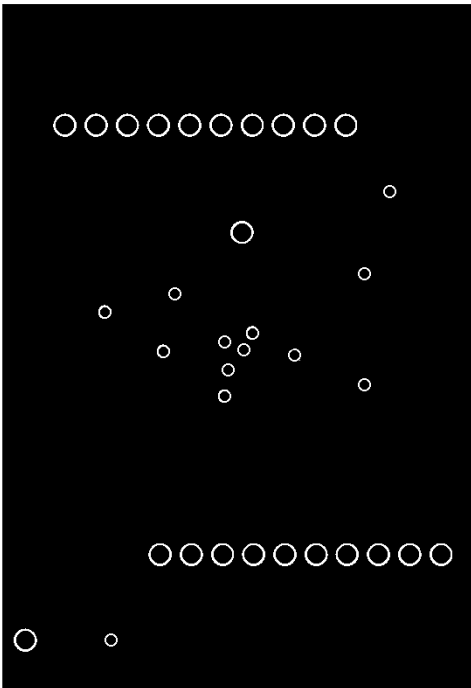
PCB Power Plane



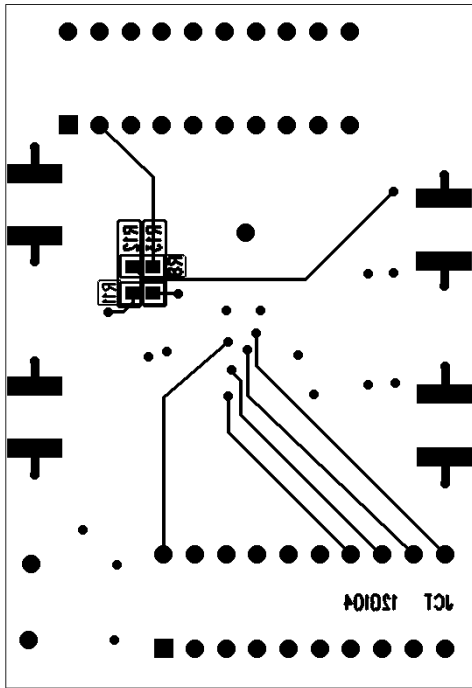
PCB Top



PCB Ground Plane



PCB Bottom



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