



What Is the Agilent E5250A?

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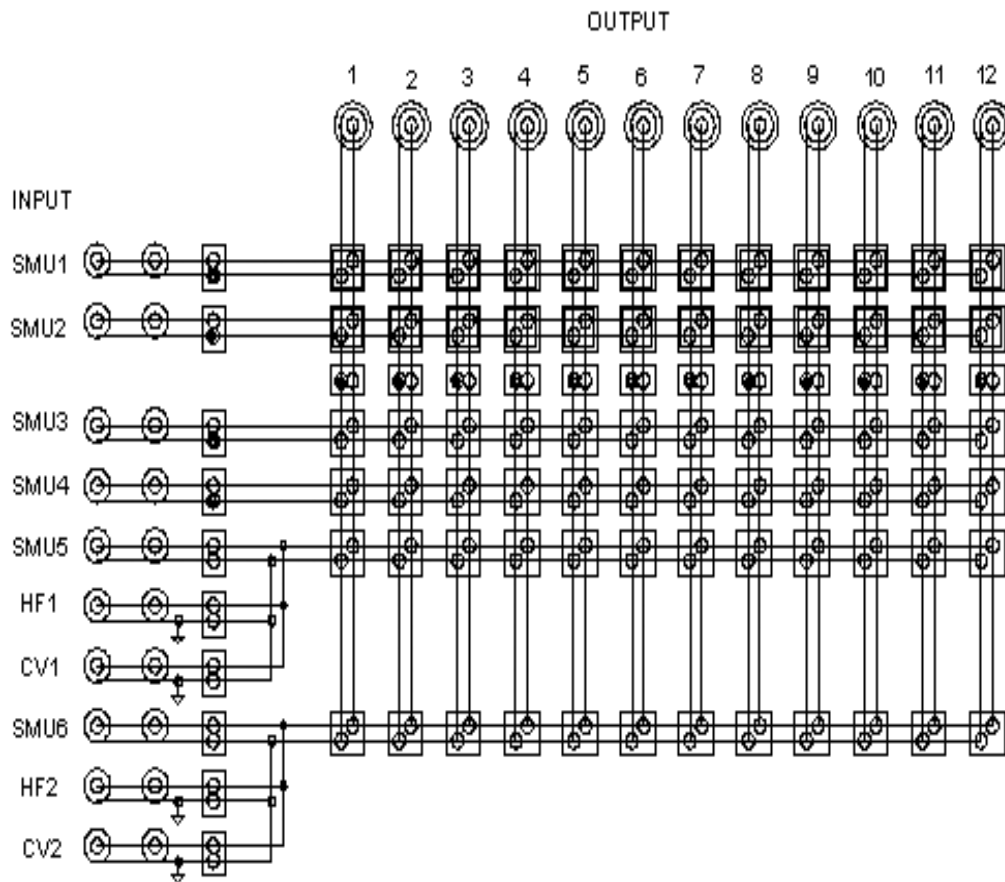
Answer: The Agilent E5250A Low-leakage Switch mainframe is a high-performance switching unit that allows you to maximize the performance of your Agilent 4155B/4156B for both CV-IV measurements and long-term reliability testing. The Agilent E5250A has four card slots, which accept the two available card types.

For measuring a sequence of many devices on a test structure, the Agilent E5252A (or E5250A option 001) crosspoint matrix module option provides the ideal solution. This card has 10 input ports and 12 output ports. The input ports consist of:

- 2 low-leakage SMU ports (SMU1 & SMU2)
- 4 general SMU ports (SMU3 - SMU6)
- 2 high-frequency (HF) ports
- 2 capacitance meter (CV) ports

The Agilent E5250A supports up to 4 of these cards, allowing for a total of up to 48 outputs. Since the Agilent 4155B/4156B and the Agilent 4284A LCR meter cannot connect to a test device simultaneously, the CV ports share common signal paths with the SMU5 and SMU6 ports. This maintains cost-effectiveness without sacrificing performance.

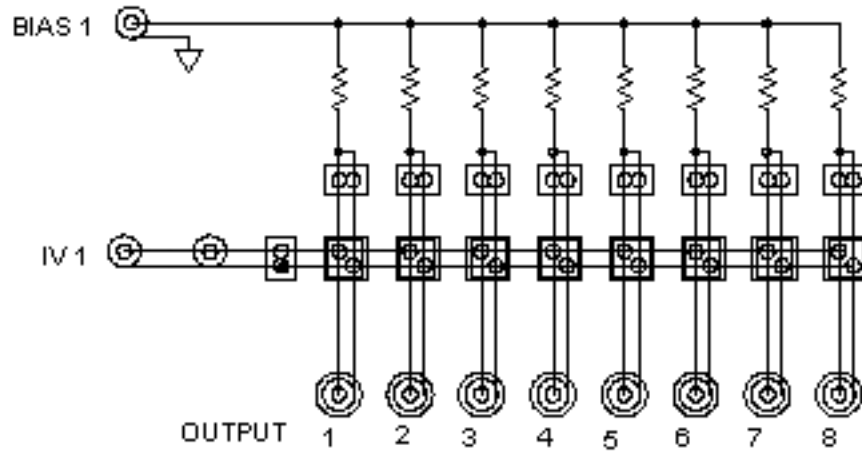
A diagram of the Agilent E5252A module is shown below:



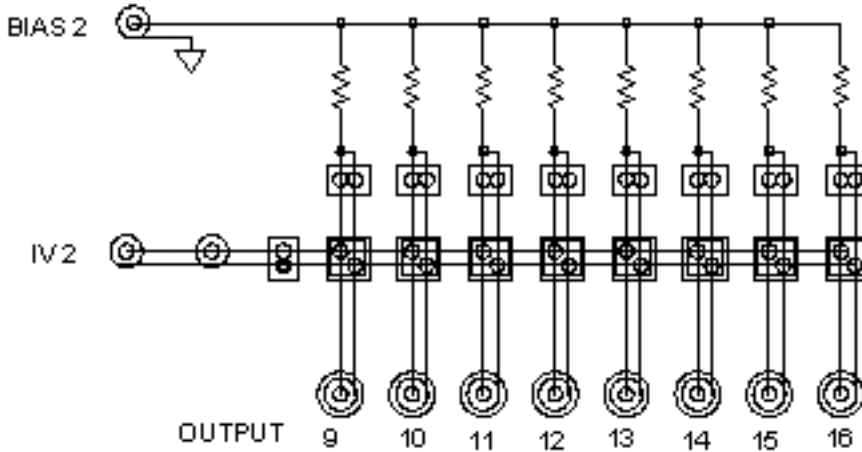
For long-term reliability measurements, the Agilent E5255A (or E5250A option 501) multiplexer module is the tool of choice. The multiplexer module has 24 outputs, organized in groups of 8. Each module has one multilevel dc bias input for each set of 8 channels, permitting the use of inexpensive power supplies for a consistent stress. The Agilent E5250A switch mainframe accepts 4 of these cards, for a total of 96 outputs. Each channel can also have a customer-selected protection resistor to safeguard against surges that could cause erroneous results. Finally, the user can gang up to 4 of the Agilent E5250A switch mainframes together to create a system with 384-channel capability.

A diagram of the Agilent E5255A module is shown below:

Block 1



Block 2



Block 3

