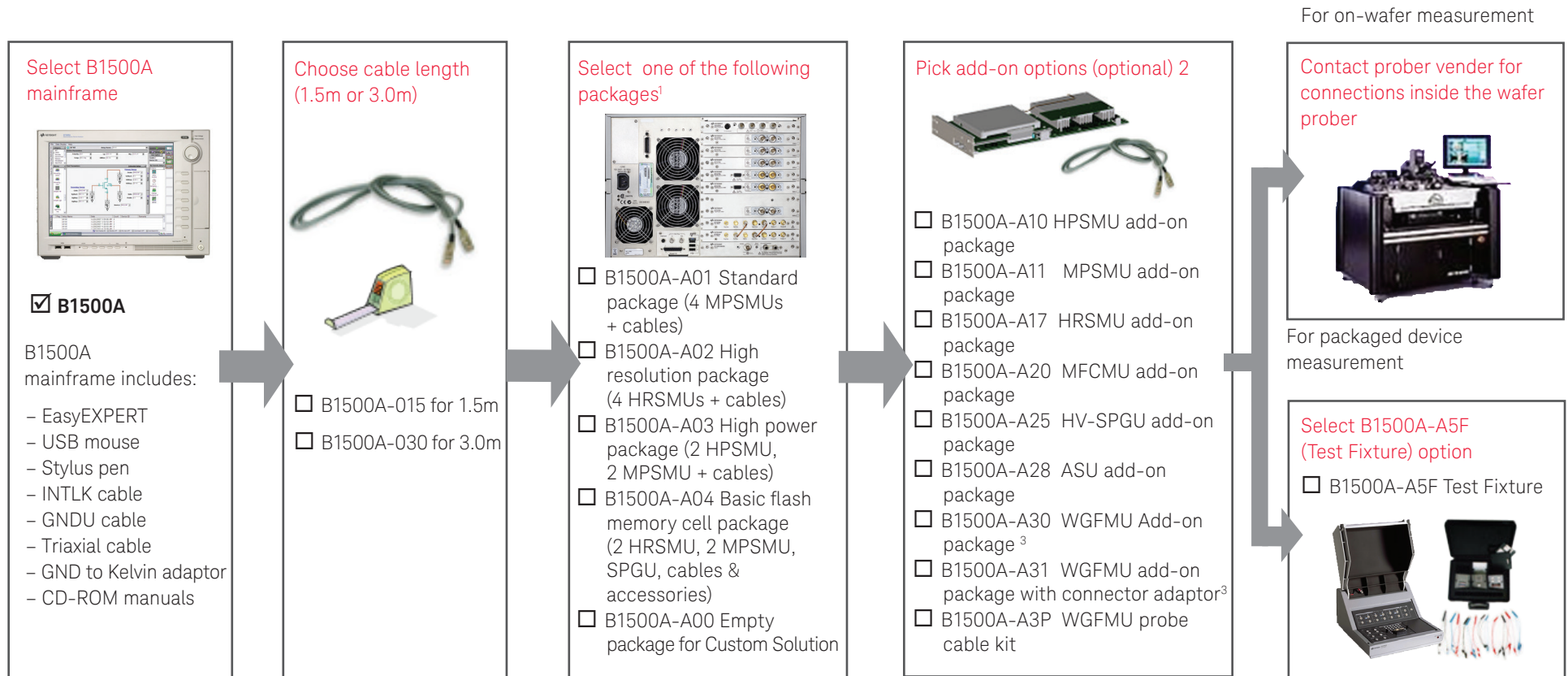


Keysight B1500A Semiconductor Device - Selection Guide

B1500A Simplified Configuration Process

Follow these simple steps to create your desired configuration:



1 Each package includes the cables that are typically required to use it. Please refer to Table 1 on the back page of this document for a description of the available measurement resources.

For more details, please download the B1500A datasheet located at www.keysight.com/find/B1500A

2 Each add-on package except for option B1500A-A3P adds one module and the cables typically required for it. You can specify multiple quantities of each add-on package (except for option B1500A-A20), so you must specify a quantity for each add-on option selected. Option B1500A-A3P includes the cables required for on-wafer measurement when using the WGF MU.

For more details, please download the B1500A datasheet located at www.keysight.com/find/B1500A

3 Please contact your local Keysight office to find out which WGF MU add-on package fits to your requirements. The complete contact list is available at www.keysight.com/find/contactus

Selecting the Correct Package Option(s) for Various Applications

Configuration Examples:






<p>For MOSFET characterization</p> <p>Standard package</p>  <p>– B1500A, B1500A-030 – B1500A-A01</p>	<p>For deep submicron device characterization</p> <p>High resolution package</p>  <p>– B1500A, B1500A-015 – B1500A-A02</p>	<p>For bipolar device or reliability characterization</p> <p>High power package</p>  <p>– B1500A, B1500A-030 – B1500A-A03</p>	<p>For flash memory cell characterization</p> <p>Basic flash memory cell package</p>  <p>– B1500A, B1500A-015 – B1500A-A04</p>	<p>For materials characterization and other similar activities</p> <p>Custom configuration using add-on options</p>  <p>– B1500A, B1500A-015 – B1500A-A00 – B1500A-A17 2ea. – B1500A-A5F</p>
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Table 1. B1500A measurement resources

Resource	Description
HPSMU	High Power SMU (200V/1A, 10fA res.)
MPSMU	Medium Power SMU (100V/100mA, 10fA res.)
HRSMU	High Resolution SMU (100V/100mA, 1fA res.)
MFCMU	Multi-Frequency Capacitance Measurement Unit (1k – 5MHz, 25V DC bias (up to 100V by SCUU))
ASU	Atto Sense Unit (100aA res. With HRSMU, Switching function)
HVSPGU	High-Voltage Semiconductor Pulse Generator (2-ch PGU with ALWG function, +/-20V force at 50Ω, +/-40V at open load, 10nsec pulse width, 30ns pulse period)
WGFMU	Waveform Generator / Fast Measurement Unit (2-ch PG and Fast IV mode, +/-10V pulse force at 50Ω load. 100ns pulse at PG mode, Minimum 5ns sampling interval)

Table 2. Other accessories

Resource	Description
B1542A	Ultra short pulsed IV package
N1301A	CMU accessories for B1500A
N1301A-100	SCUU (SMU CMU Unify Unit)
N1301A-102	SCUU cable (3m)
N1301A-110	SCUU magnetic stand
B1542A	Ultra short pulsed IV package