

Programming Example: Performing a series of measurements with an SDM and Scan Card

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Here are a list of recommended commands for programmatically executing a scan with a SIGLENT SDM3055 or SDM3065X with scan card option (formerly the SC1016 option)

NOTE: # indicates a comment. You may need to change this symbol, depending on which programming environment you choose to use.

The commands, shown in quotes, will need to be sent using the appropriate function call for the program environment and command type. More information on each command can be found in the [Programming Guide for the SDM](#). For exact command syntax, please refer to your programming environment documentation.

```
"ROUT:SCAN ON" #Enable scan
```

```
"ROUT:FUNC STEP" #Select step type of scan
```

```
"ROUT:DCV:AZ OFF" #Turn off the Autozero. Scan will execute more quickly, but accuracy may suffer over time due to drift
```

```
"ROUT:CHAN 1,ON,DCV,AUTO,FAST" #Configure Channel 1
```

```
"ROUT:CHAN 2,ON,DCV,AUTO,FAST" #Configure Channel 2
```

```
"ROUT:CHAN 3,ON,DCV,AUTO,FAST" #Configure Channel 3
```

```
"ROUT:CHAN 4,ON,DCV,AUTO,FAST" #Configure Channel 4
```

```
"ROUT:CHAN 5,ON,DCV,AUTO,FAST" #Configure Channel 5
```

```
#The scan will start at the Low channel and step to the High, defined below
```

```
"ROUT:LIMI:HIGH 5" #This sets the highest channel value in the scan list
```

```
"ROUT:LIMI:LOW 1" #This sets the lowest channel value in the scan list
```

```
"ROUTe:COUN 1" #Perform a single scan
```

```
"ROUTe:START ON" #Begin scan
```

```
#Poll (loop, when response matches "OFF", scan is finished)
```

```
"ROUT:START?" #Is the scan finished?
```

```
#Insert proper READ statement here to evaluate return string for poll
```

```
#Return data string from each channel individually
```

"ROUT:DATA? 1"

#Insert proper READ statement here to return the data string

"ROUT:DATA? 2"

#Insert proper READ statement here to return the data string

"ROUTe:DATA? 3"

#Insert proper READ statement here to return the data string

"ROUTe:DATA? 4"

#Insert proper READ statement here to return the data string

"ROUTe:DATA? 5"

#Insert proper READ statement here to return the data string



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