

Pulse Command Addendum

A.1 INTRODUCTION

This document describes and documents the new pulse command that is being added to the 48x3 series boards.

A.2 DESCRIPTION

New commands were added to the ROUTe root on the SCPI command tree to pulse an output line. Multiple lines can be pulsed at a time by concatenating commands in one command message. A pulse width command lets the user set a common pulse with for all output lines.

The user sets the output polarity with the SOURCE:DATA:PORTn:POLarity command and follows it with a SOURCE:DATA:PORTn command to set the outputs to the off value. Subsequent pulse commands will generate logic true pulses.

A.3 TABLE 3-2

The following is added to the ROUTe root in Table 3-2.

ROUTE	Bit Commands	
:PULSe	byte, bit	PL
:CHANnel	number or channel list	PC
:WIDTH	0-500 [250]	PW

A.4 TABLE 3-3

The following definitions are added to the ROUTe root in Table 3-3.

**TABLE 3-3 SCPI COMMANDS AND QUERIES
(CONTINUED)**

Keyword	Default Value	Description
ROUTe	-	Starts bit command branch
:PULSe byte,bit	-	Pulses a bit to the logic 1 or ON level as defined by the prior SOURce:DATA:PORTn:POLarity or OPn command. Specify the bit as byte, bit. Byte is defined as 1 to 16, bit is 0 to 7. i.e. ROUT:PULSe 7,0 or PL 7,0.
:CHANnel	-	Pulses a bit to the logic 1 or the ON level as defined by the prior SOURce:DATA:PORTn:POLarity or OPn command. Specify the channel output line to pulse by a number or by a channel list. i.e. ROUT:PULS:CHAN 12 i.e. ROUT:PULS:CHAN (@ 1:4)
:WIDTh	250	Sets a common pulse width in ms for all output lines that are pulsed. Values are 0 to 500 ms in 10 ms increments. The default is 250 ms.

A.5 TIMING SPECIFICATIONS

Pulse Width	10 to 500 ms \pm 0.1 ms
Skew	Channel 1 to 128 when all channel pulsed < 14 ms maximum.

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