

DAC38J84 POWER AND WAKEUP TIME MEASUREMENTS

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SETUP

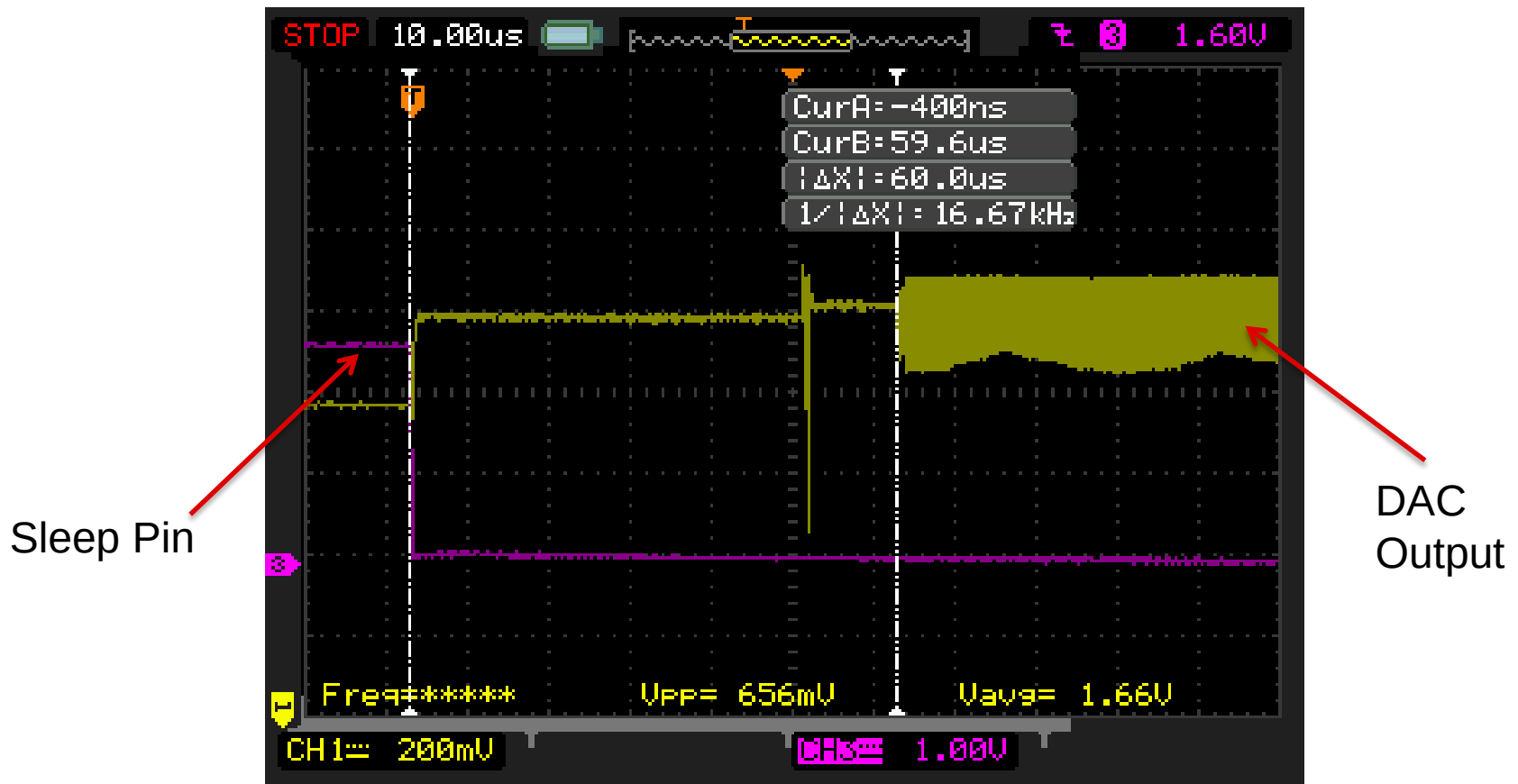
- Assuming 8X Interpolation
- DAC Output Rate: 1280 MSPS
- Power Measurements
 - Turn off DAC A, B, C, D
 - Turn off Bias Amp, PLL, Temp Sensor, CLK Receiver
 - Turn off all Serdes lanes
- Wakeup Time Measurement for JESD Lanes
 - Provide external data via TSW14J56
 - Turn on Sleep Pin
 - DAC A, B, C, D
 - Bias Amp, PLL, Temp Sensor, CLK Receiver
 - Toggle all Serdes lanes with Config74 Register

Power Consumption

Power Rails	Current (A)	Power (mW)
0.9V (VDIG, VDDT, VDDDA, VDDCLK)	0.089	80.1
1.8V (APLL, VDDR, VQPS, AREF, VDIO)	0.010	18
3.3V (ADAC)	0.005	16.5
		= 114.6mW

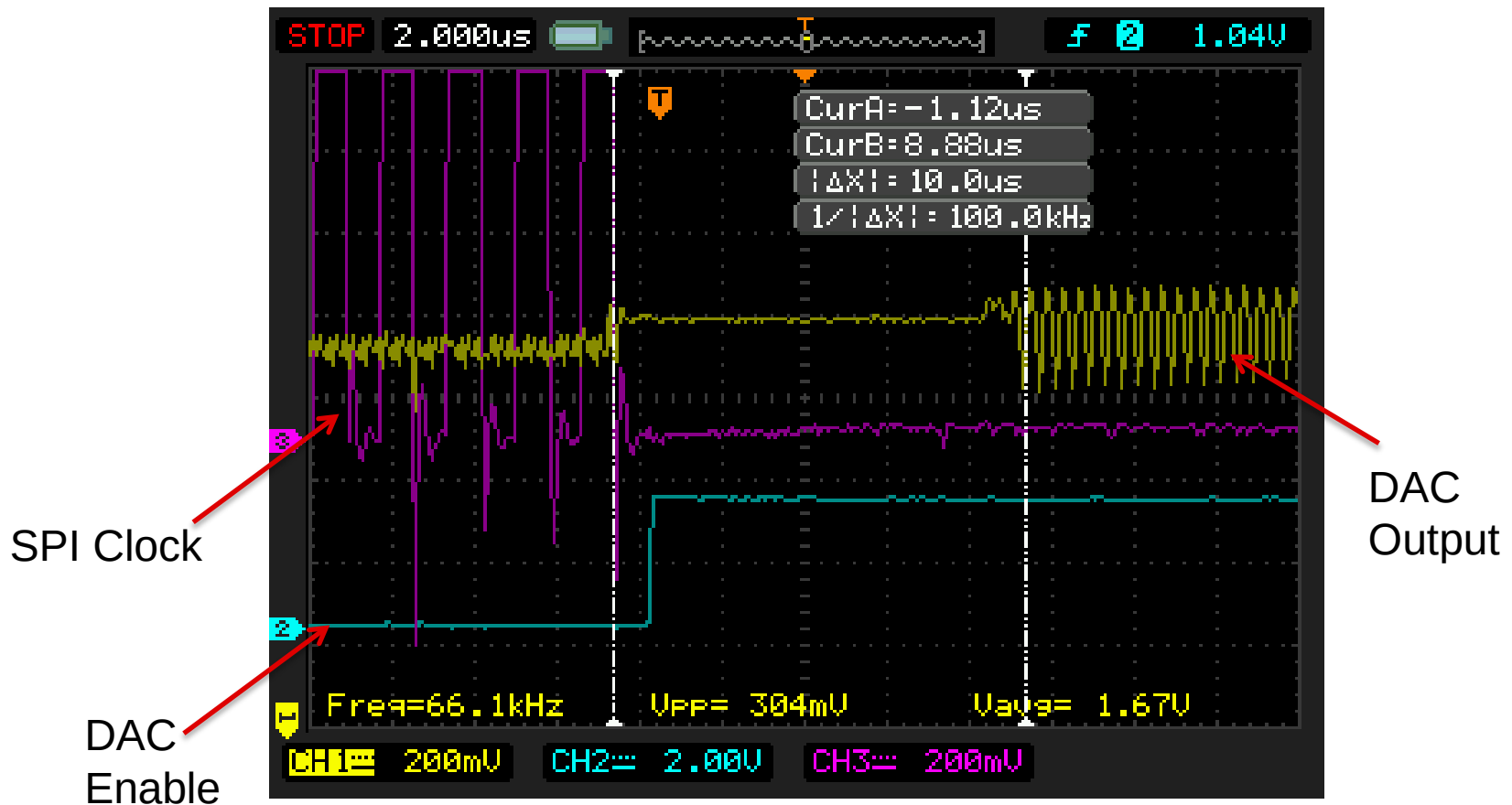
Wakeup Time Measurements

Block	Time (μs)
Sleep Pin	60
JESD Lanes	10
SPI Write	2.4
	= 72.4μs



Wakeup Time for Sleep Pin

60μs



Wakeup Time for JESD Lanes

10μs