

# Moonstone Hardware Test Report Results

R4028-M1015-01  
Version: 1.0  
May 7, 2024



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Parameter	Specification	Measured Results	Status
Frequency	<100Khz	98.8140E+3Hz	TESTRes
Clock High	>4 $\mu$ s	4.9476E-6s	TESTRes
Clock Low	>4 $\mu$ s	5.1725E-6s	TESTRes
$V_{Clockmax}$	<3.57V	3.4000V	TESTRes
$V_{Clockmin}$	>-.5V	40.0000E-3V	TESTRes
$V_{Clockih}$	2.31-3.6V	3.3600V	TESTRes
$V_{Clockil}$	-.5-.99V	120.0000E-3V	TESTRes
$V_{Datamax}$	<3.57V	3.4000V	TESTRes
$V_{Datamin}$	>-.5V	40.0000E-3V	TESTRes
$V_{Dataih}$	2.31-3.6V	3.3200V	TESTRes
$V_{Datail}$	-.5-.99V	80.0000E-3V	TESTRes
Clock Rise Time	<1000ns	201.6602E-9s	TESTRes
Clock Fall Time	<300ns	7.0431E-9s	TESTRes
Data Rise Time	<1000ns	208.6589E-9s	TESTRes
Data Fall Time	<300ns	7.1467E-9s	TESTRes
Data Setup Time	>250ns	4.9800E-6SECONDS	TESTRes
Data Hold time	> 0ns	540.0000E-9SECONDS	TESTRes
Start Condition Hold Time	> 4 $\mu$ s	540.0000E-9SECONDS	TESTRes
Stop Condition Setup Time	> 4 $\mu$ s	540.0000E-9SECONDS	TESTRes

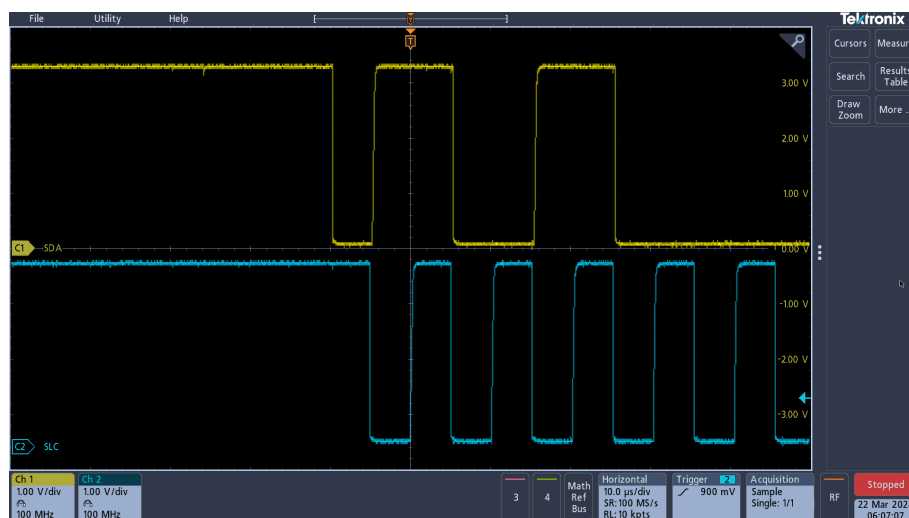


Figure 1: Waveform

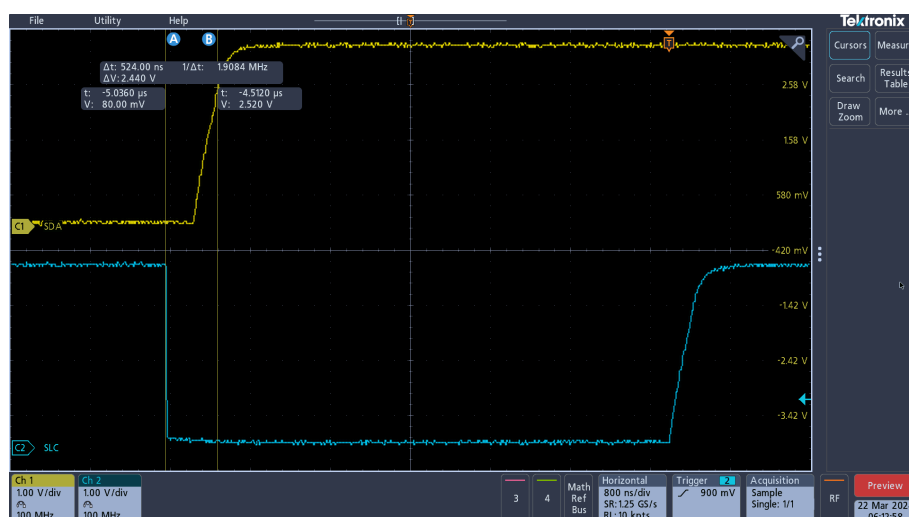


Figure 2: Data Hold Time

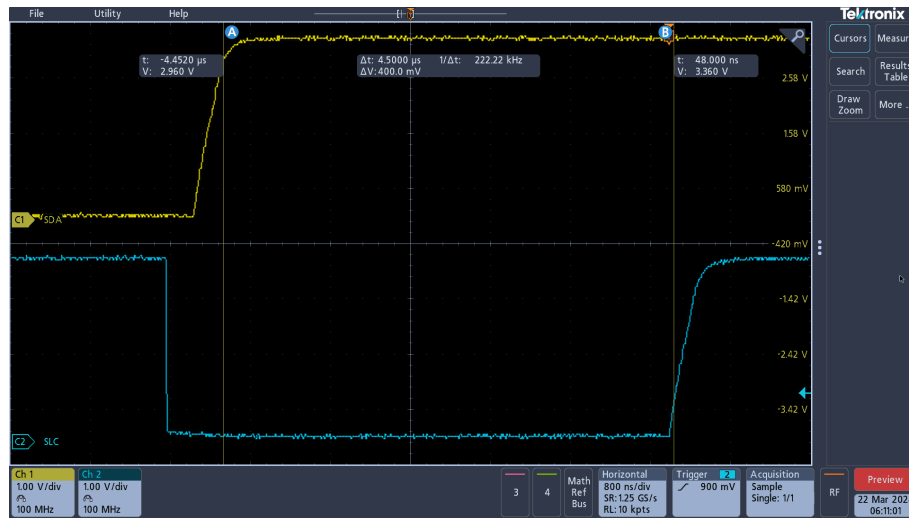


Figure 3: Data Setup Time

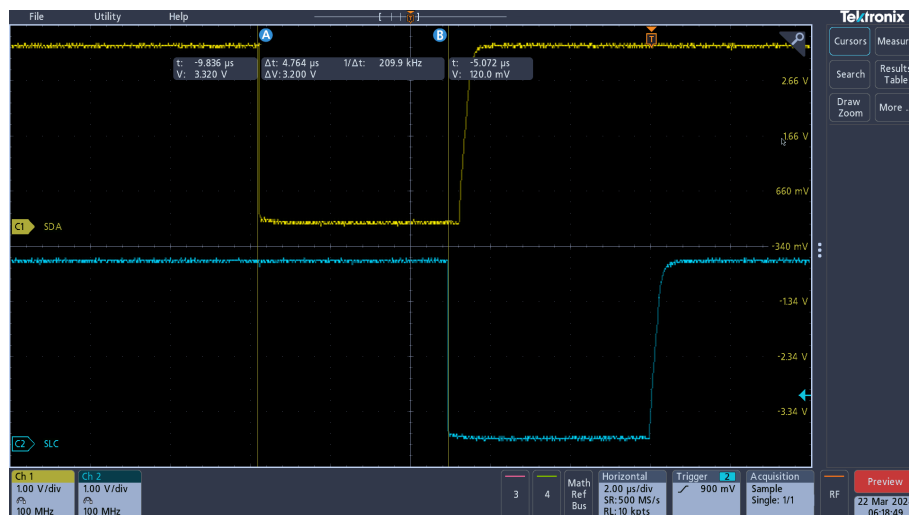


Figure 4: Start Condition



Parameter	Specification	Measured Results	Status
Frequency	<100Khz	98.8140E+3Hz	TESTRes
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Start Condition Hold Time	> 4 $\mu$ s	540.0000E-9SECONDS	TESTRes
Stop Condition Setup Time	> 4 $\mu$ s	540.0000E-9SECONDS	TESTRes

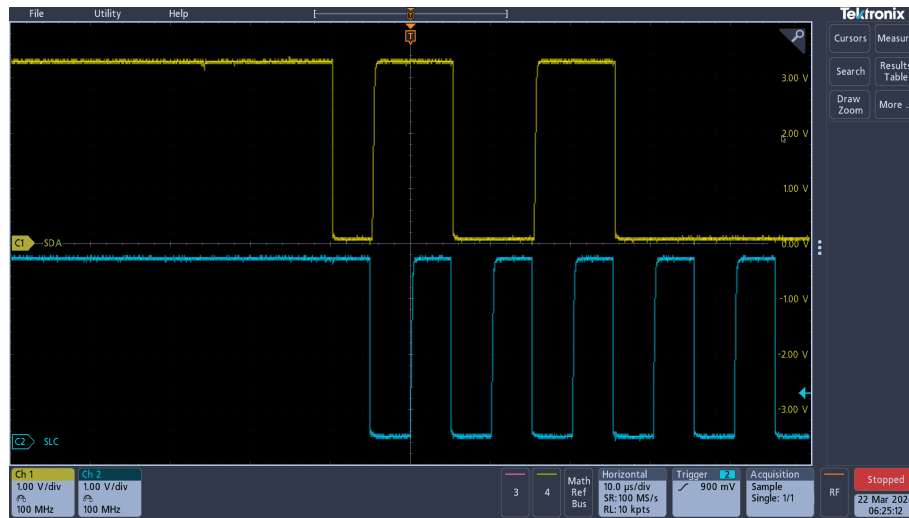


Figure 5: Waveform

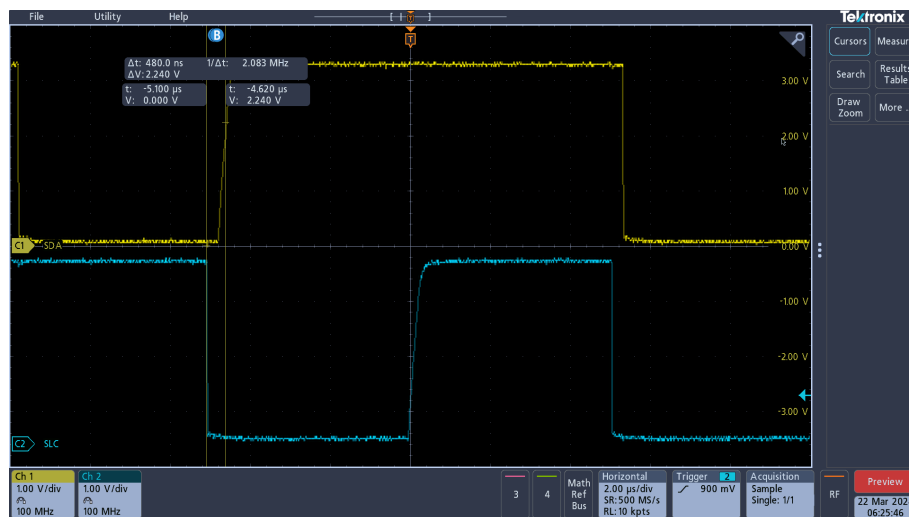


Figure 6: Data Hold Time

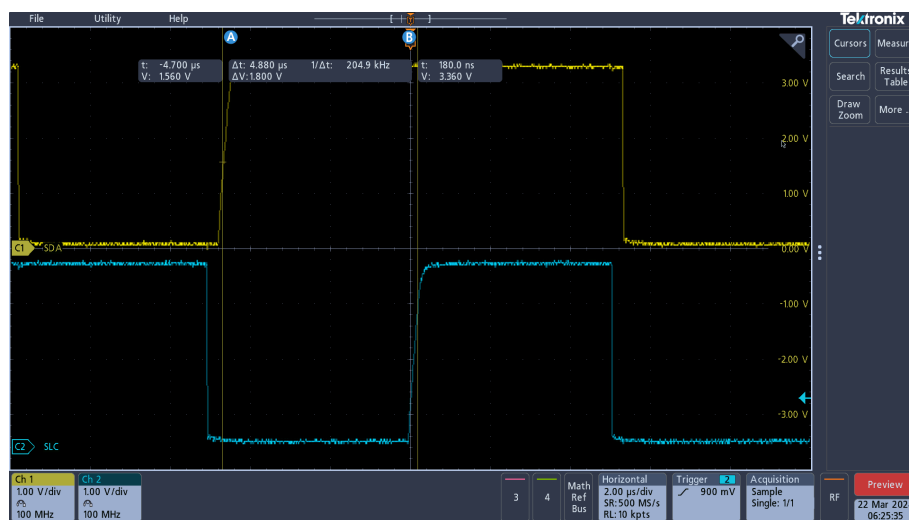


Figure 7: Data Setup Time

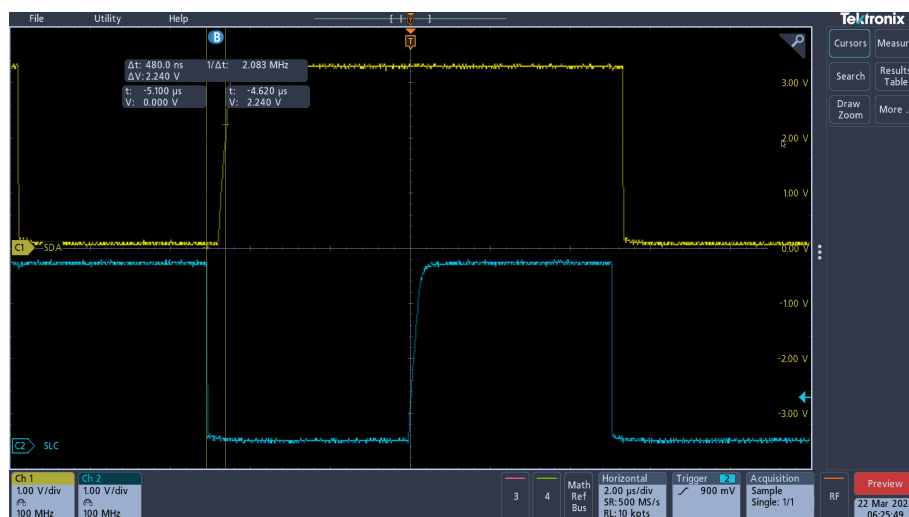


Figure 8: Start Condition

Parameter	Specification	Measured Results	Status
Frequency	<100Khz	98.8140E+3Hz	TESTRes
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$V_{Datamax}$	<3.57V	3.4000V	TESTRes
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Stop Condition Setup Time	> 4 $\mu$ s	540.0000E-9SECONDS	TESTRes



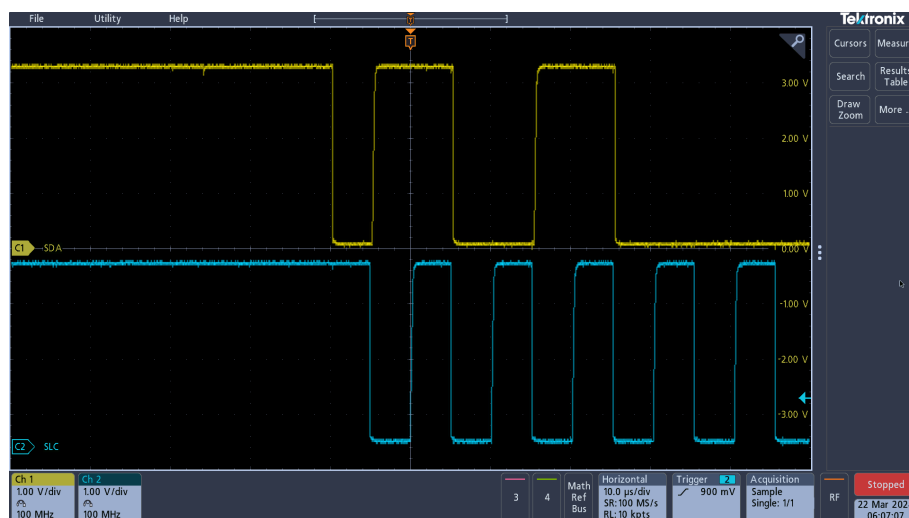


Figure 9: Waveform

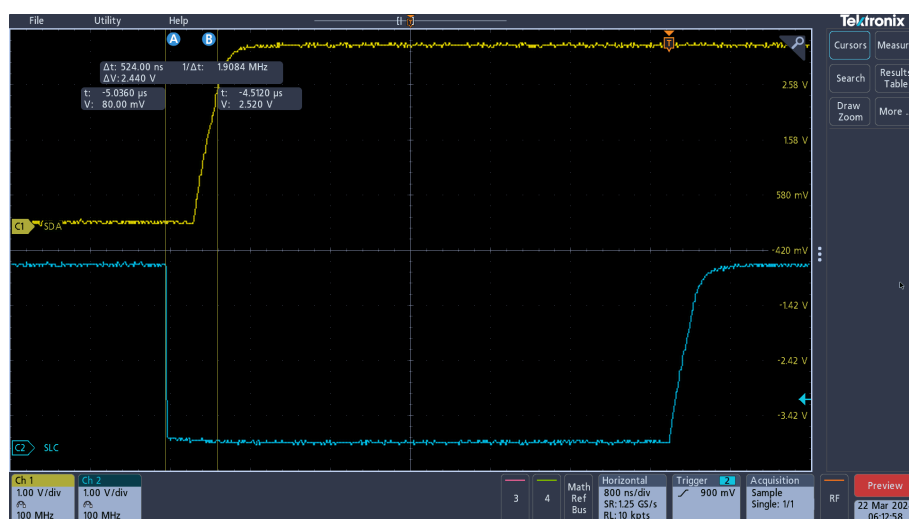


Figure 10: Data Hold Time

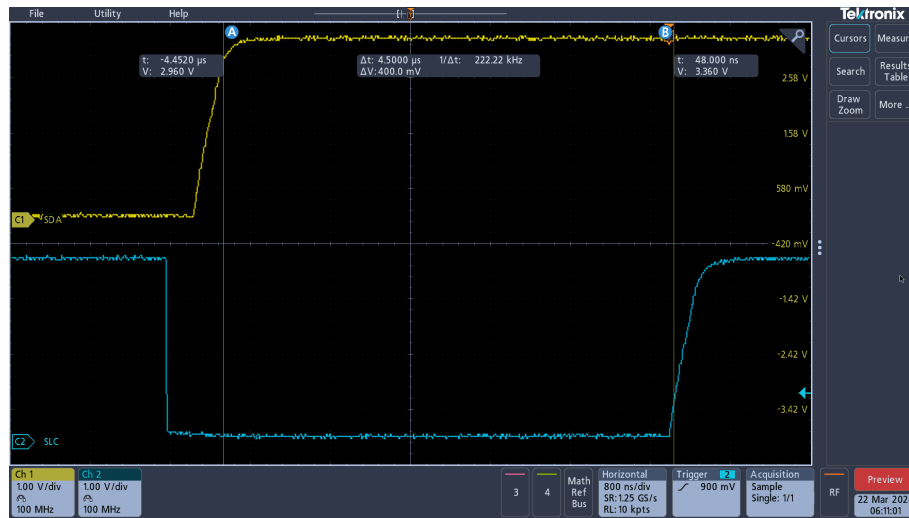


Figure 11: Data Setup Time

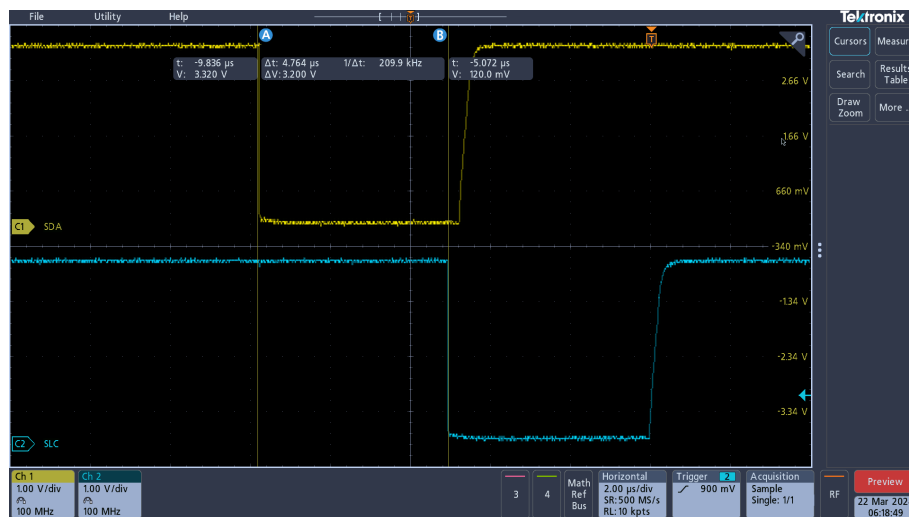


Figure 12: Start Condition