

TIM SW8

“010101” [1,2,3,4,5,6]

(1='on')

Slot 20 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "010101" [1,2,3,4,5,6] (1='on')



Slot 16 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "010101" [1,2,3,4,5,6] (1='on')



Slot 10 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "010101" [1,2,3,4,5,6] (1='on')



TIM SW8

“110101” [1,2,3,4,5,6]

(1='on')

(110101 = 010101+0.5 ns)

Slot 20 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "110101" [1,2,3,4,5,6] (1='on')



Slot 16 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "110101" [1,2,3,4,5,6] (1='on')



Slot 10 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "110101" [1,2,3,4,5,6] (1='on')



TIM SW8

“011101” [1,2,3,4,5,6]

(1='on')

(101101 = 010101+2.0 ns)

Slot 20 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "011101" [1,2,3,4,5,6] (1='on')



Slot 16 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "011101" [1,2,3,4,5,6] (1='on')



Slot 10 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "011101" [1,2,3,4,5,6] (1='on')

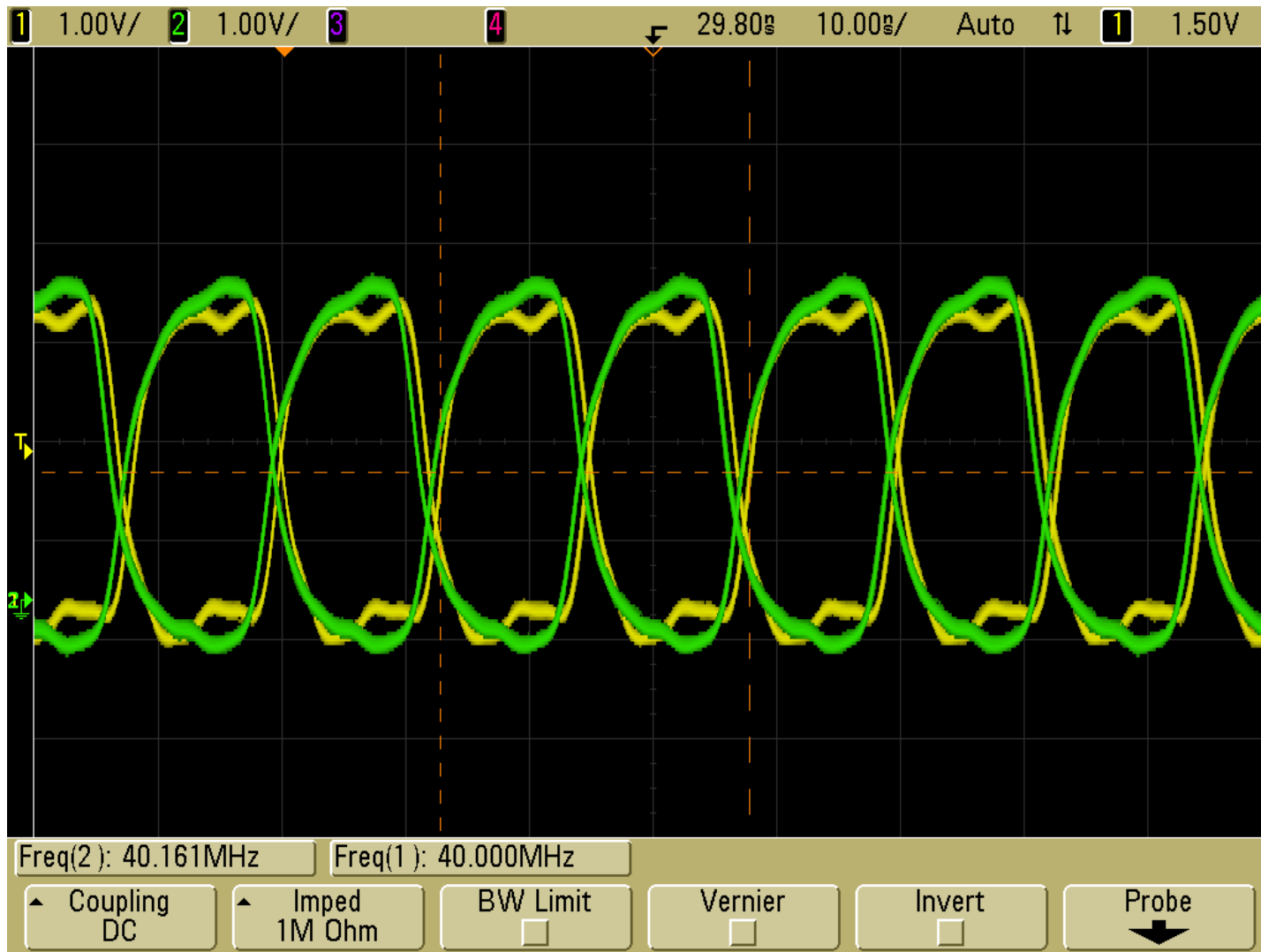


Timing difference between LHC_Clk on different Channels on the MRODx Module

(Measured at via pin AG16, IC1004, IC3004, IC5004 and IC7004)

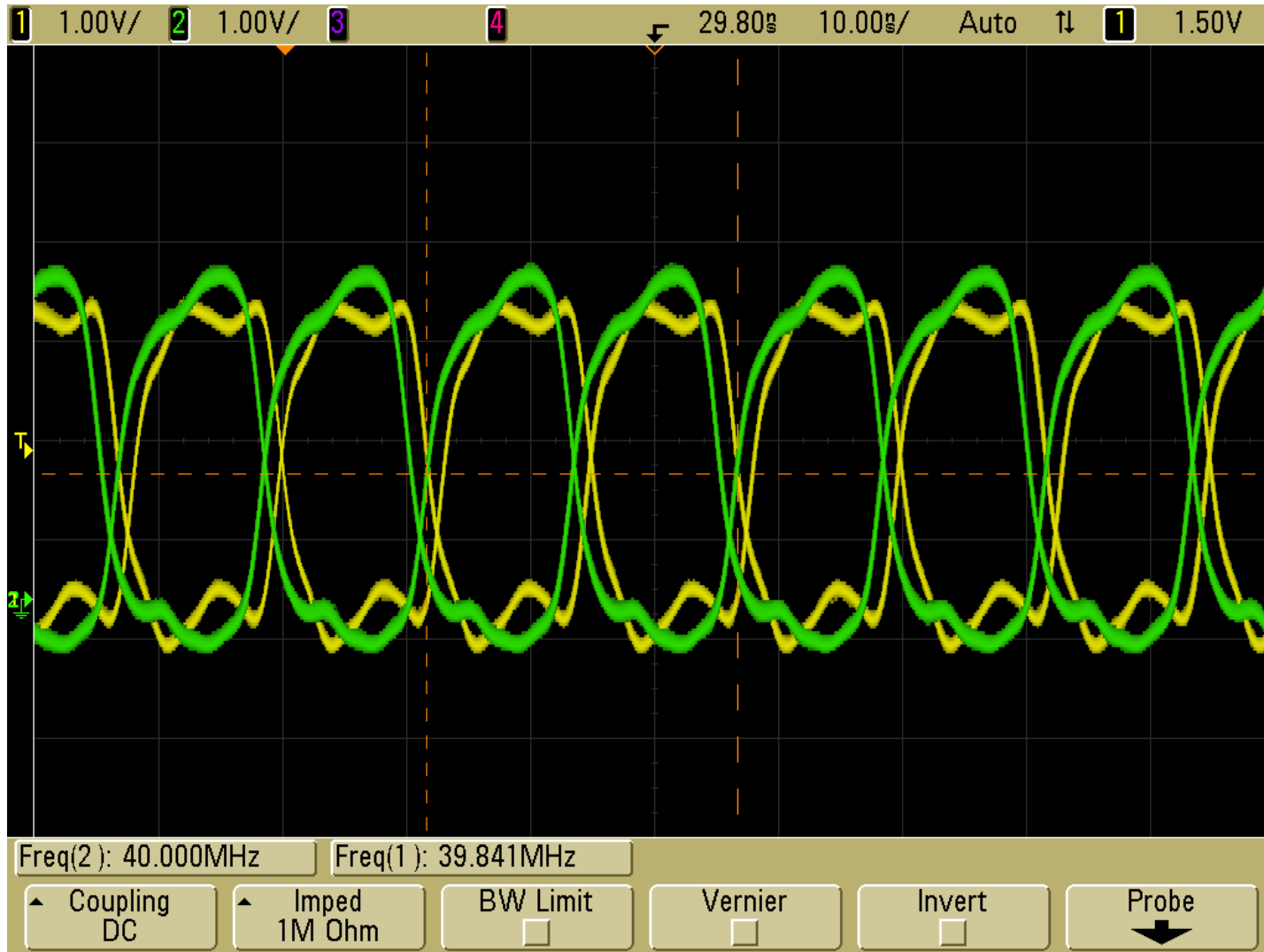
LHC_Clk1 (Ch 1, yellow)

LHC_Clk2 (Ch 2, green)



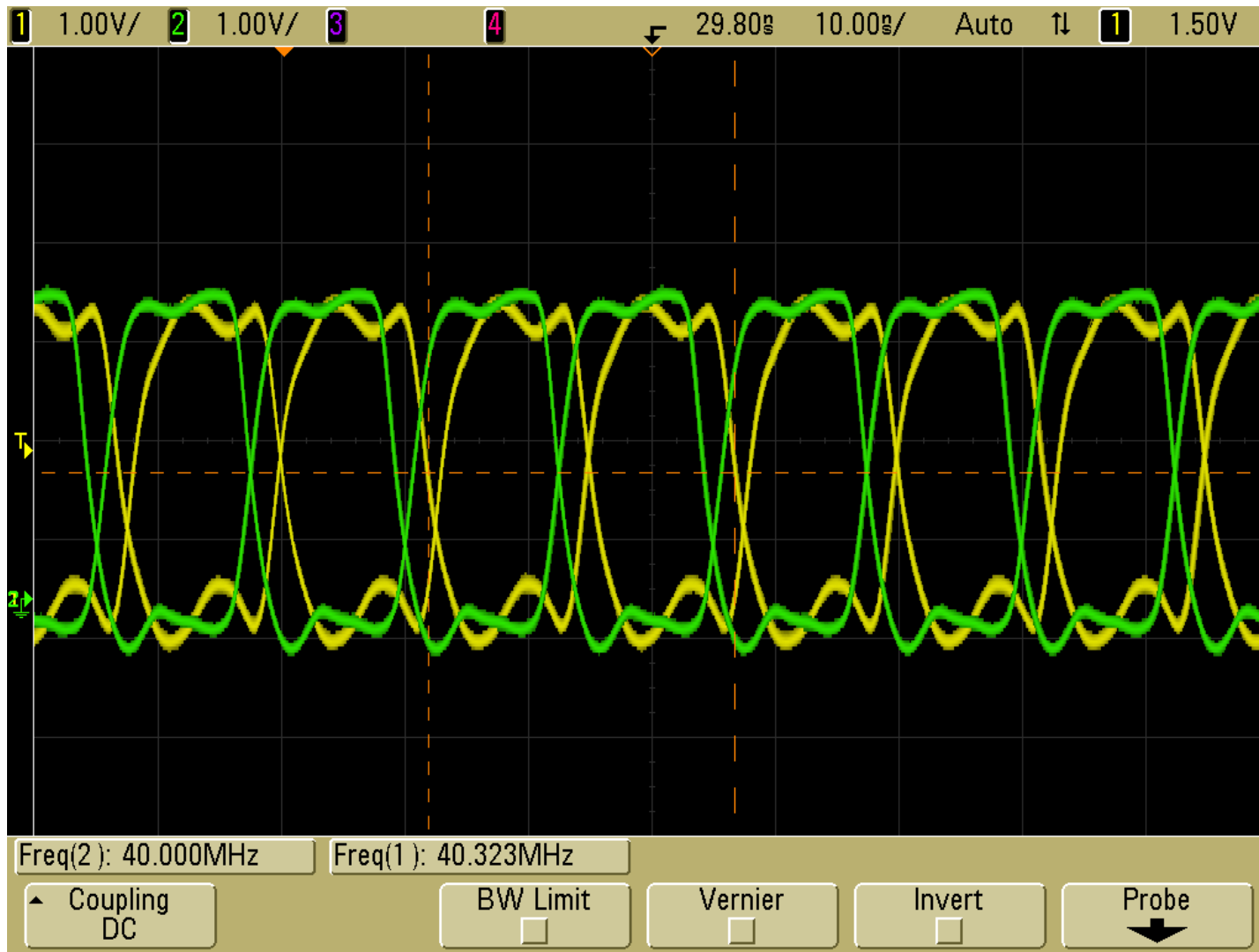
LHC_Clk1 (Ch 1, yellow)

LHC_Clk3 (Ch 2, green)

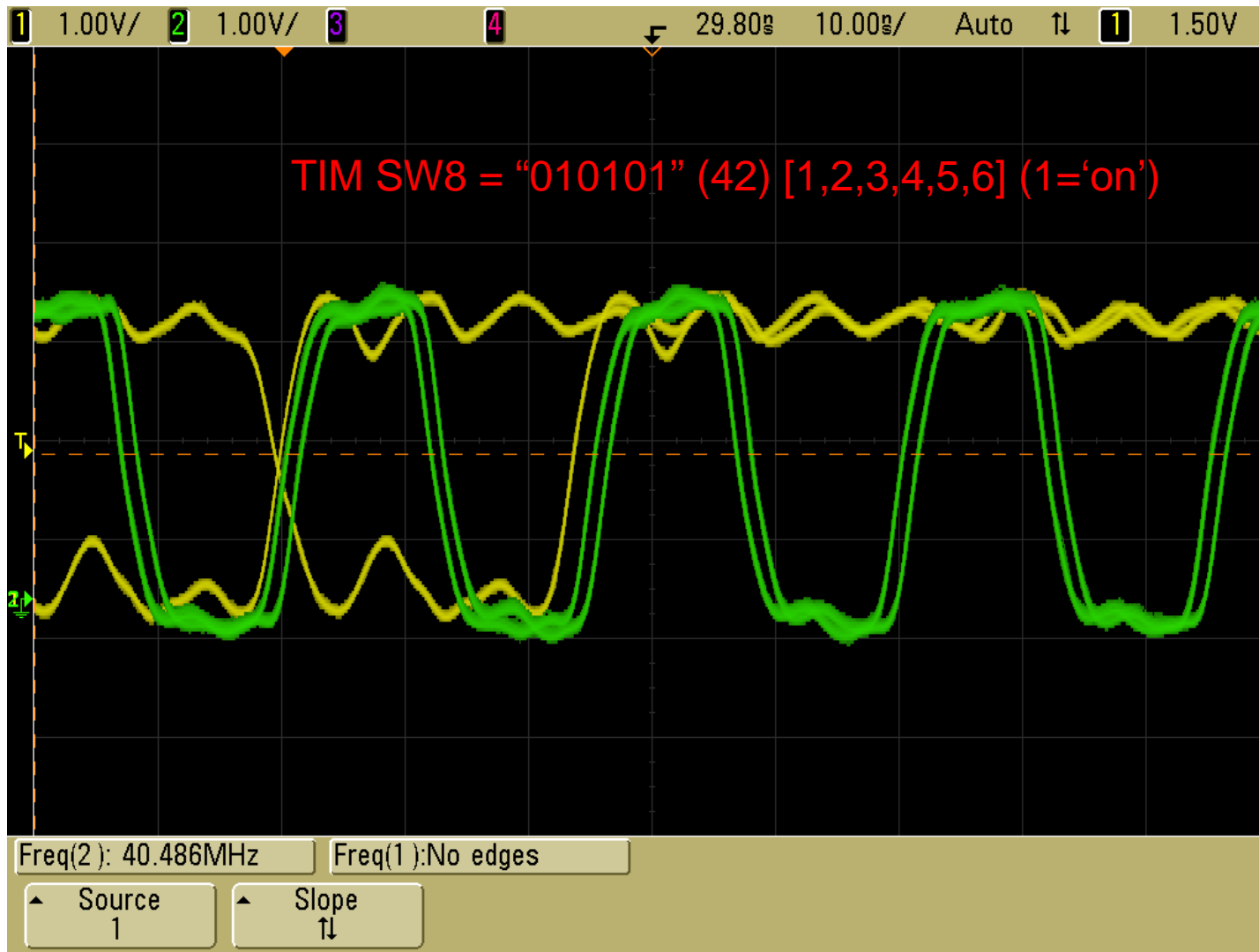


LHC_Clk1 (Ch 1, yellow)

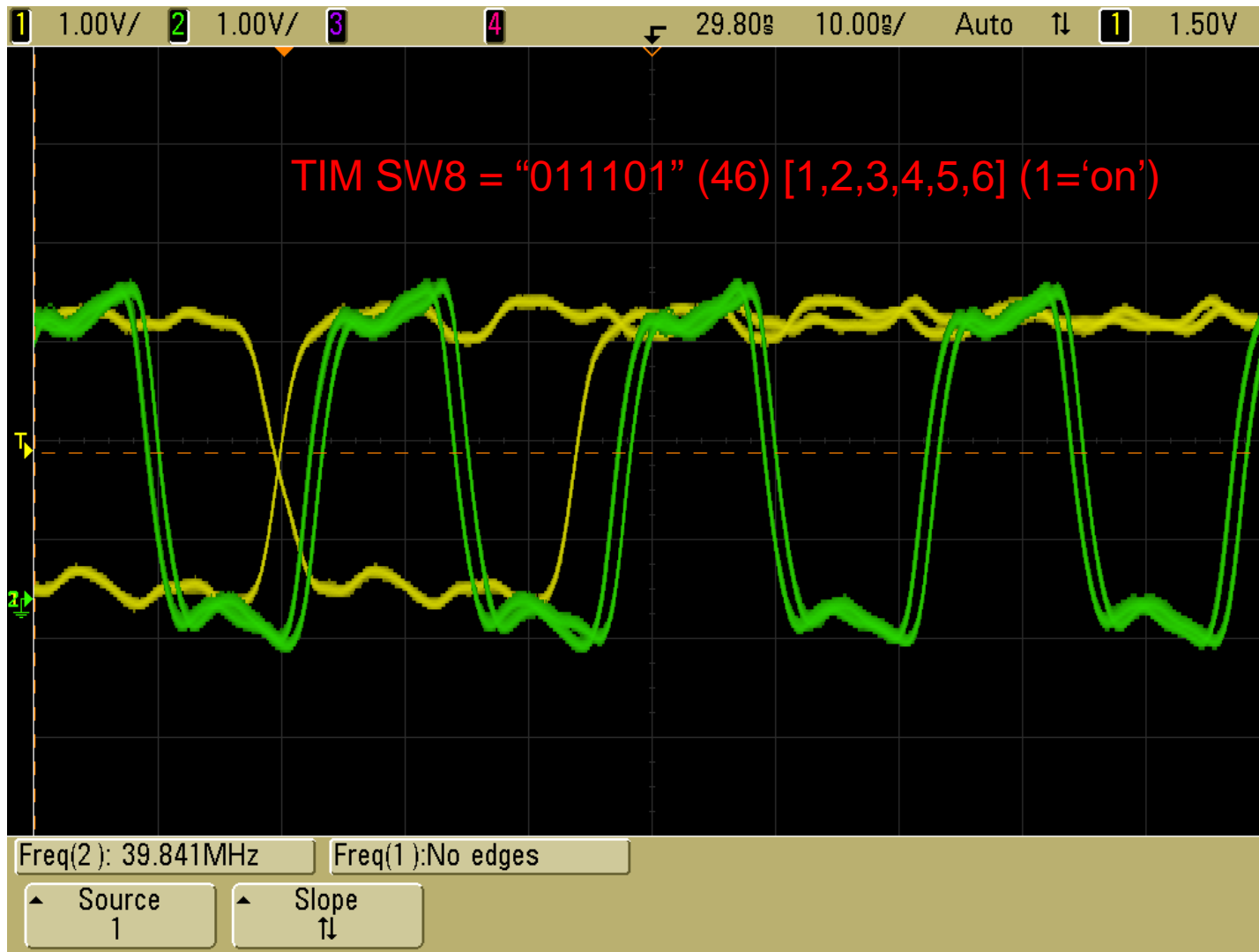
LHC_Clk4 (Ch 2, green) (Note there are no components for MROD-In 4)



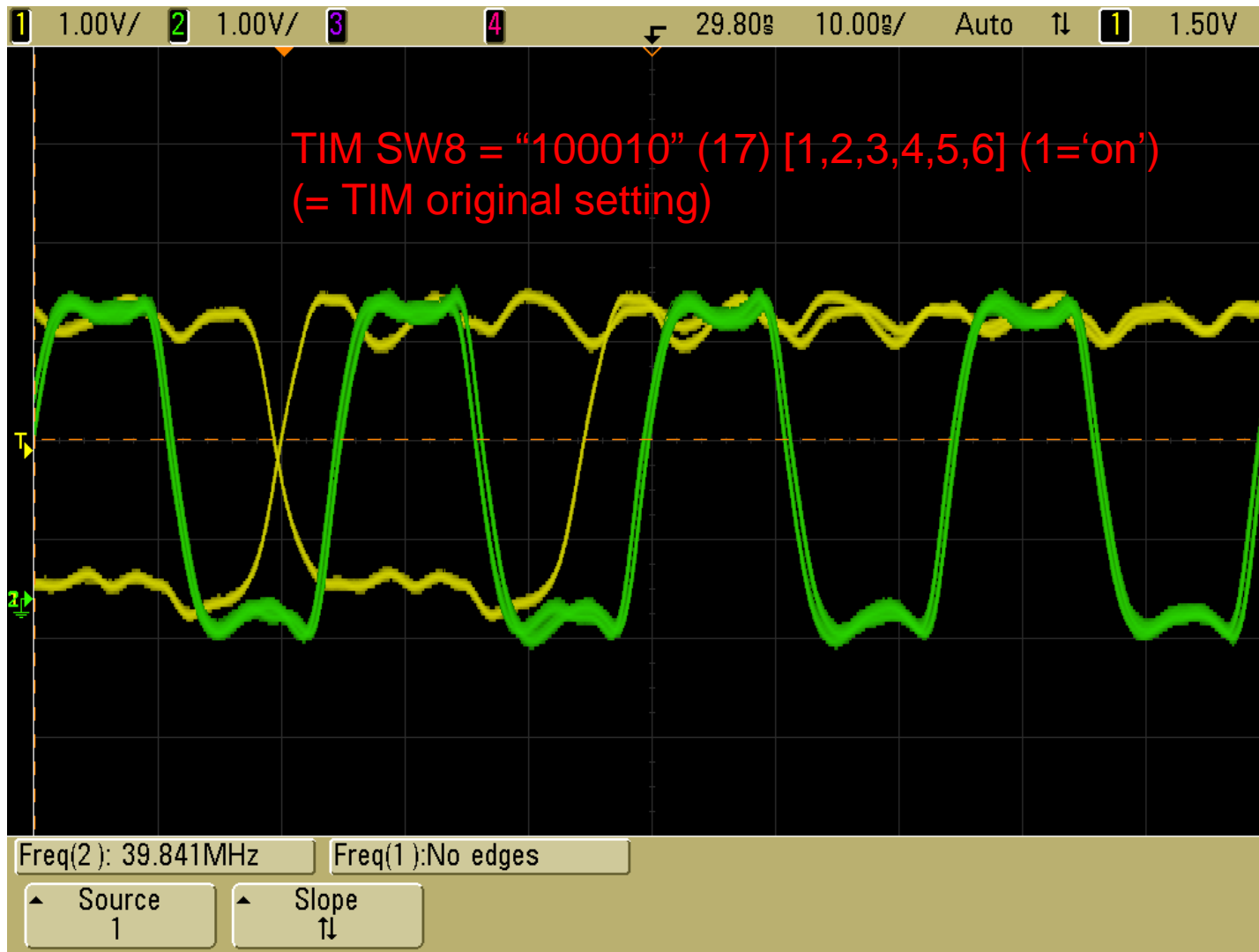
TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



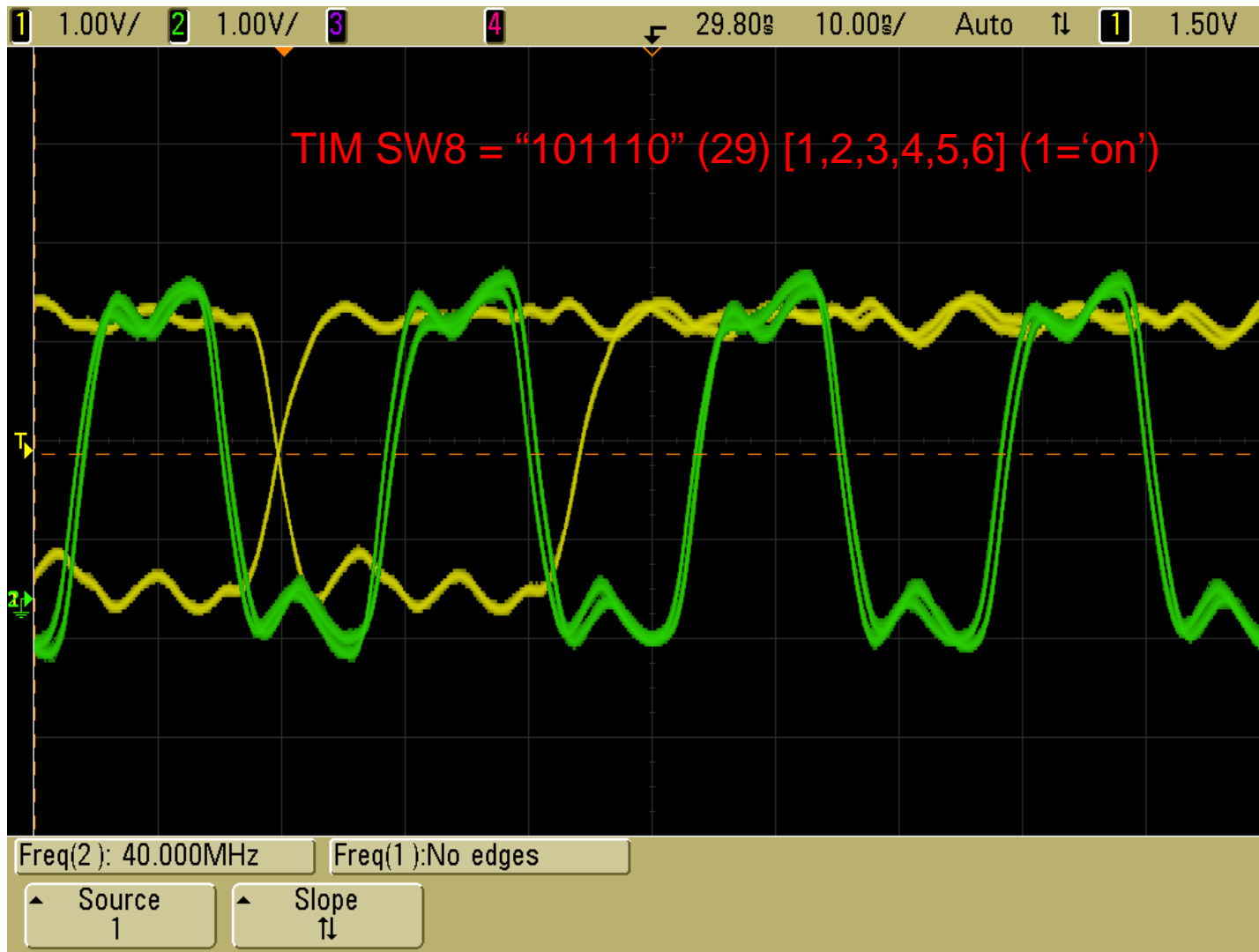
TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



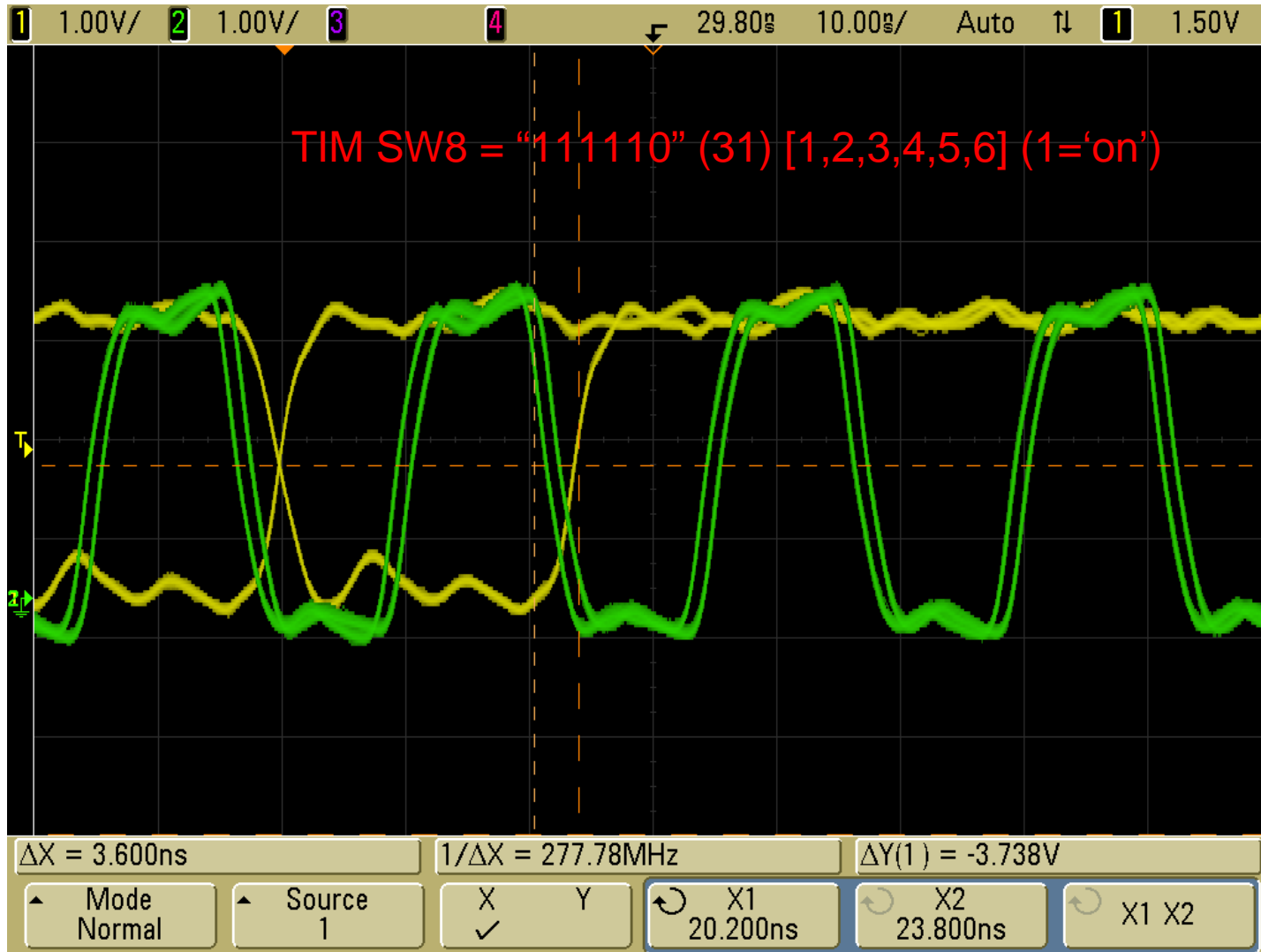
TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



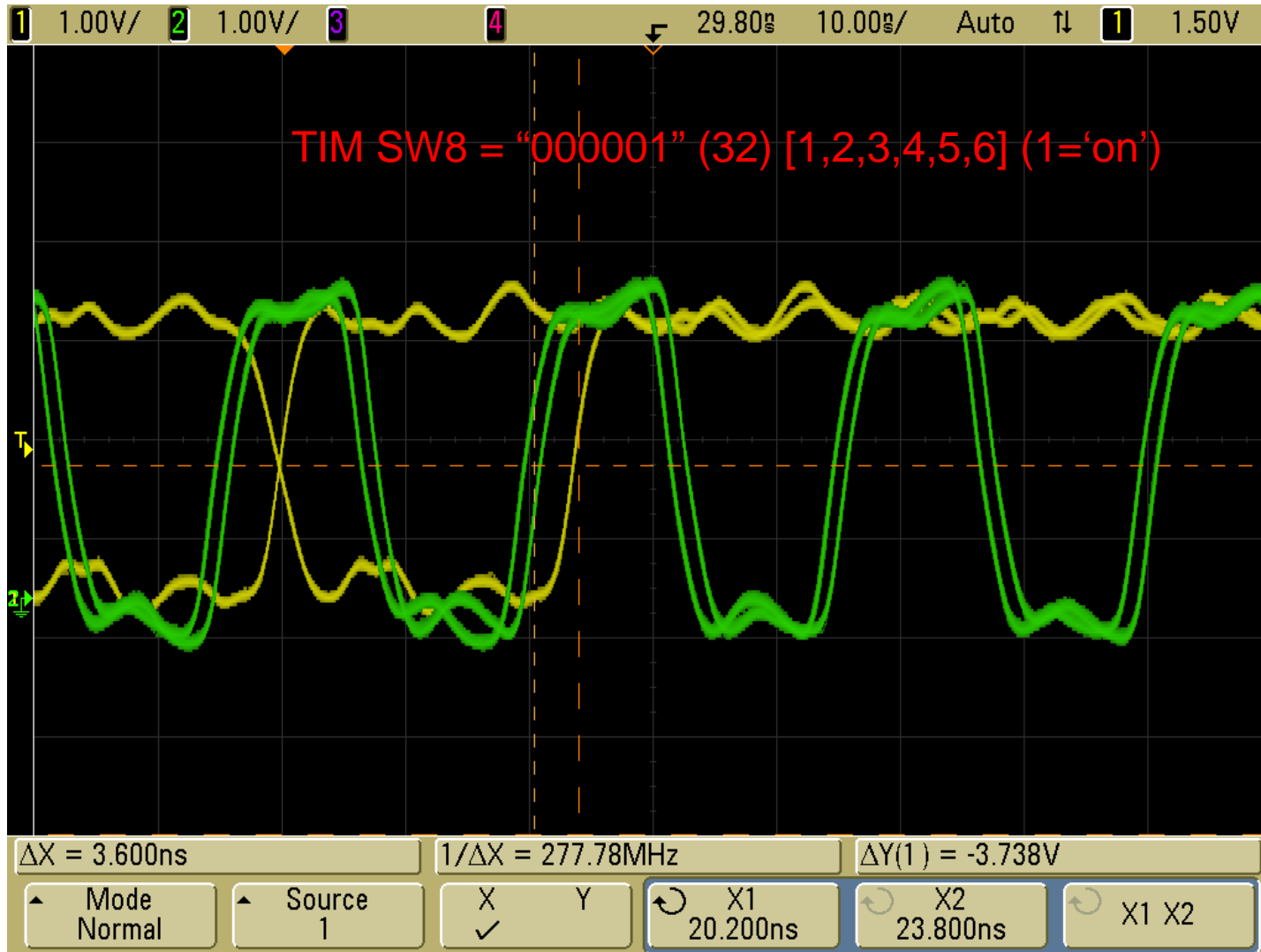
TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



TTC_n(0) (measured at IC3004 pin AK23; Ch 1, yellow)
LHC_Clk2 (measured at IC3004 pin AG16; Ch 2, green)



Seems that the PDU16F device is not linear with the switch settings of SW8
Specially SW8(6) = MSB does create a big step (12.5 ns)

Optimal Setting:

TIM SW8 = "111110" (31) [1,2,3,4,5,6] (1='on')

Slot 10 Measured at P3 (Ch1=Pin31d, Ch2=Pin18d, Gnd= Pin12d)
TIM SW8 = "111110" [1,2,3,4,5,6] (1='on')

