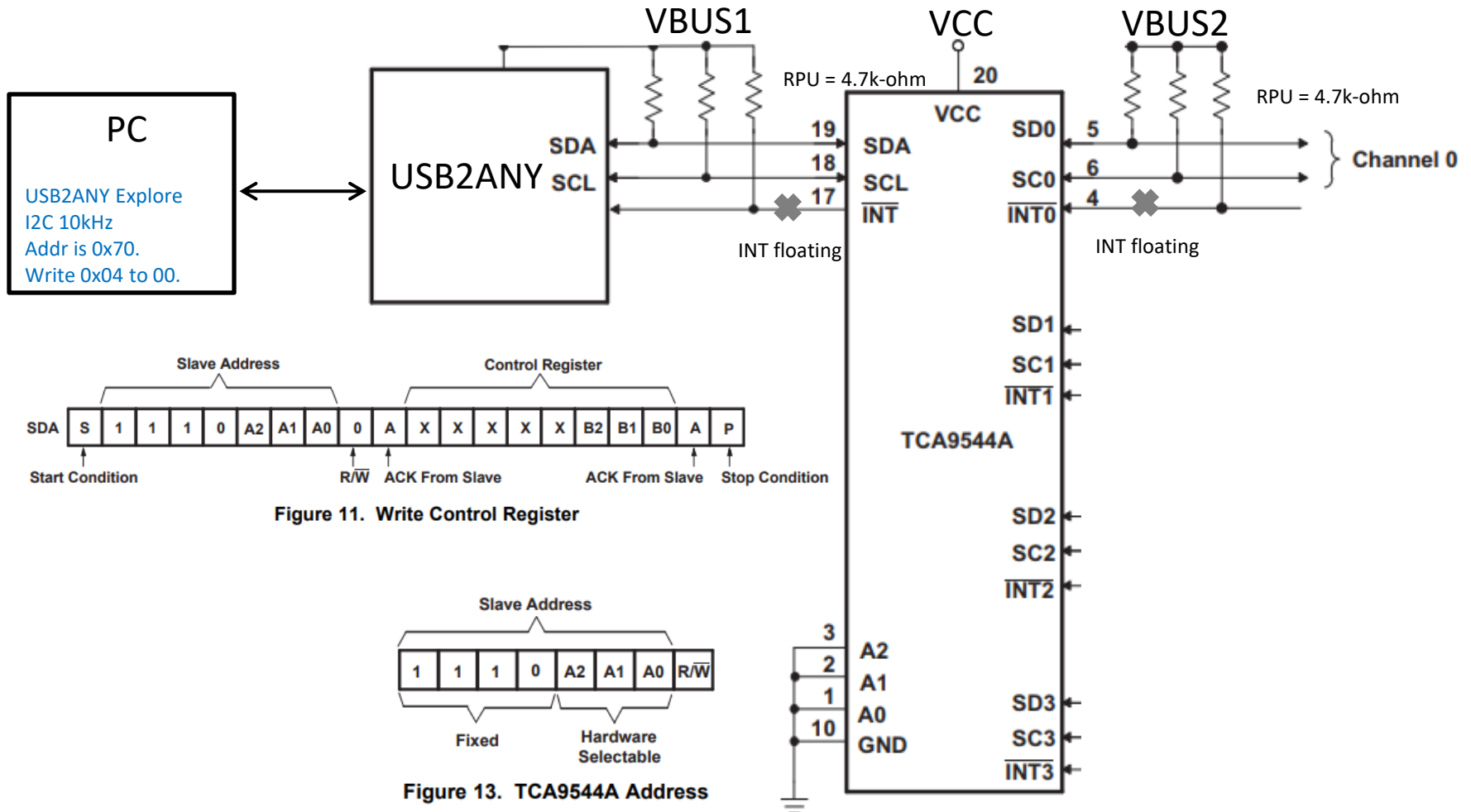


TCA9544A VCC and VBUS Test

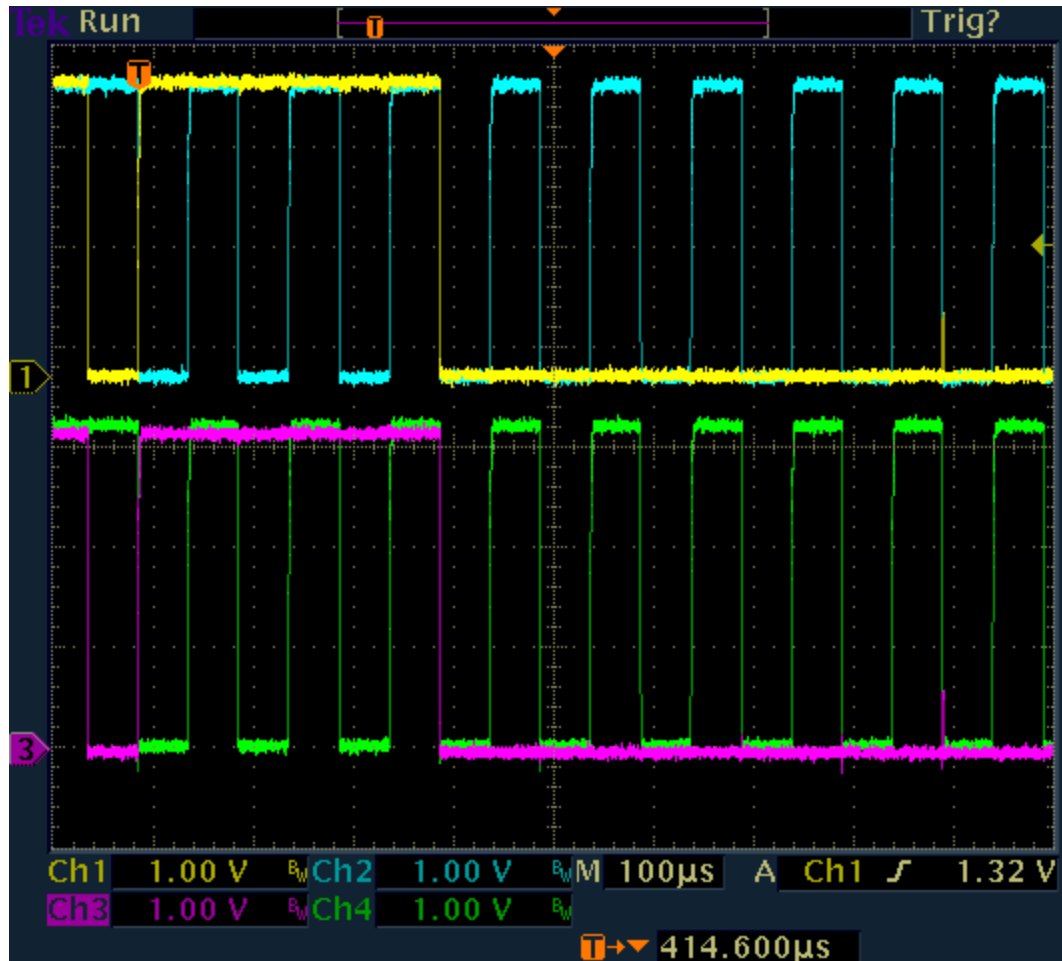
Ting Ye

Test Setup



$VCC/VBUS1/VBUS2 = 1.8V/3.3V/3.3V$

CH1: SDA
CH2: SCL
CH3: SDA0
CH4: SCL0



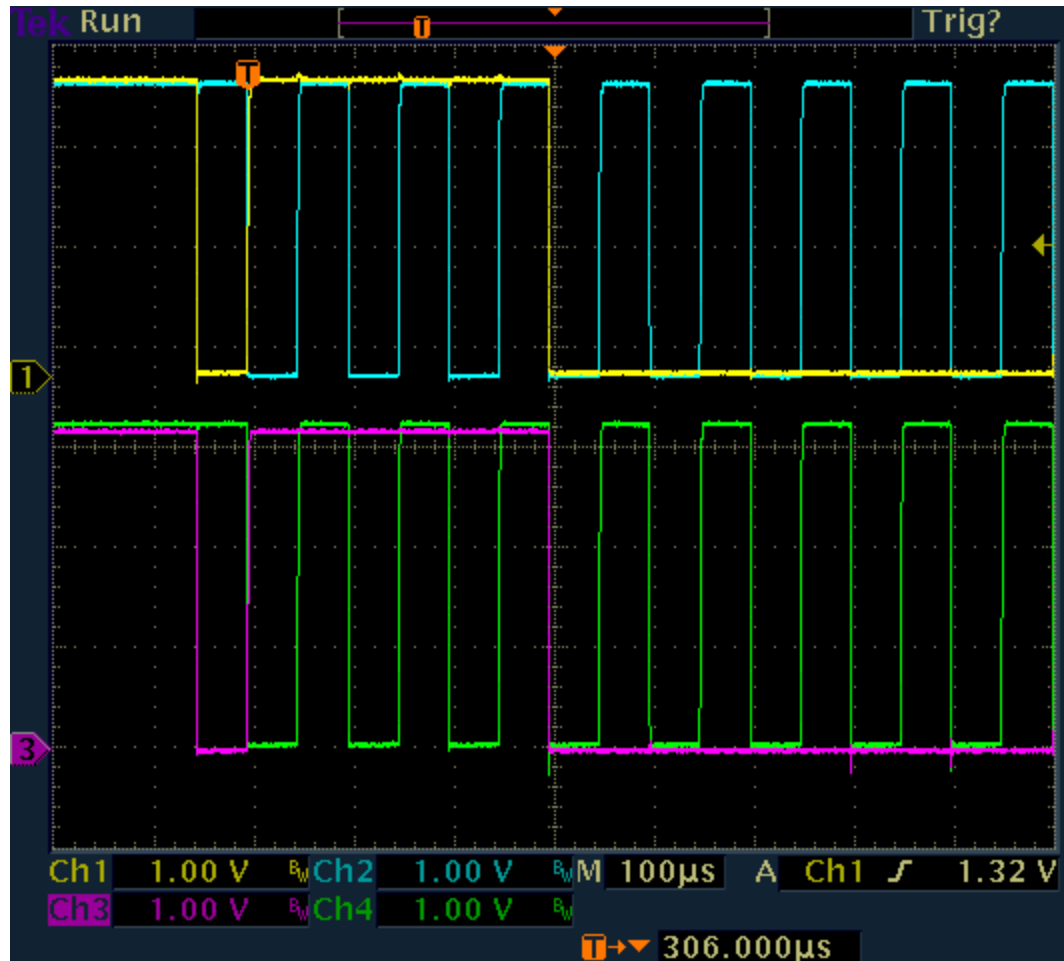
$$VCC/VBUS1/VBUS2 = 1.8V/3.3V/1.8V$$

CH1: SDA
CH2: SCL
CH3: SDA0
CH4: SCL0

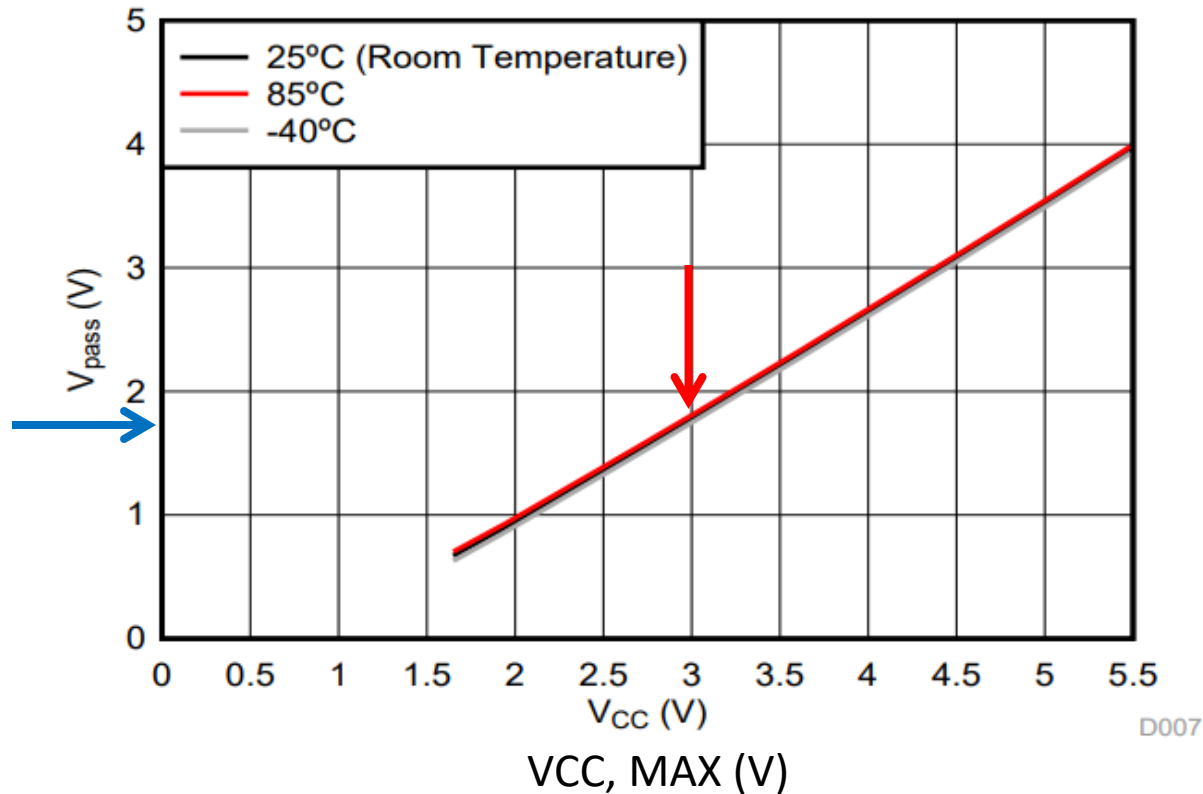


$$VCC/VBUS1/VBUS2 = 3.3V/3.3V/3.3V$$

CH1: SDA
CH2: SCL
CH3: SDA0
CH4: SCL0



VPASS and VCC MAX

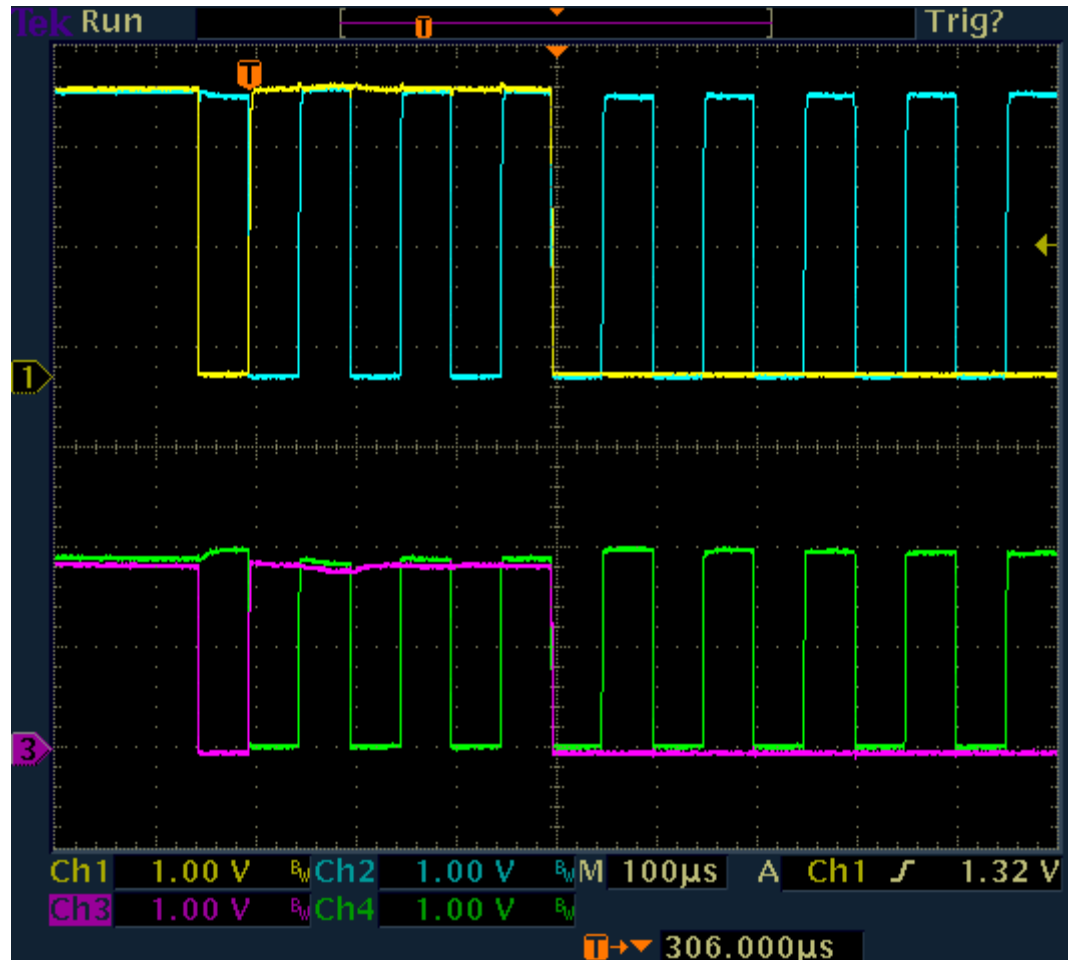


- $V_{CC}/V_{BUS1}/V_{BUS2} = 3.3V/3.3V/1.8V$
- If V_{pass} is 1.8V, V_{CC} maximum is approximately 3V.
- If V_{CC} is larger than 3V, the MOSFET will be conducted when transmitted signals are in high voltage level.

Figure 16. Pass-Gate Voltage (V_{pass}) vs Supply Voltage (V_{CC}) at Three Temperature Points

$$VCC/VBUS1/VBUS2 = 3.3V/3.3V/1.8V$$

CH1: SDA
CH2: SCL
CH3: SDA0
CH4: SCL0



$$VCC/VBUS1/VBUS2 = 3.3V/3.3V/1.8V$$

CH1: SDA
CH2: SCL
CH3: SDA0
CH4: SCL0

