bq2589x Application Diagram with MTK-PE+
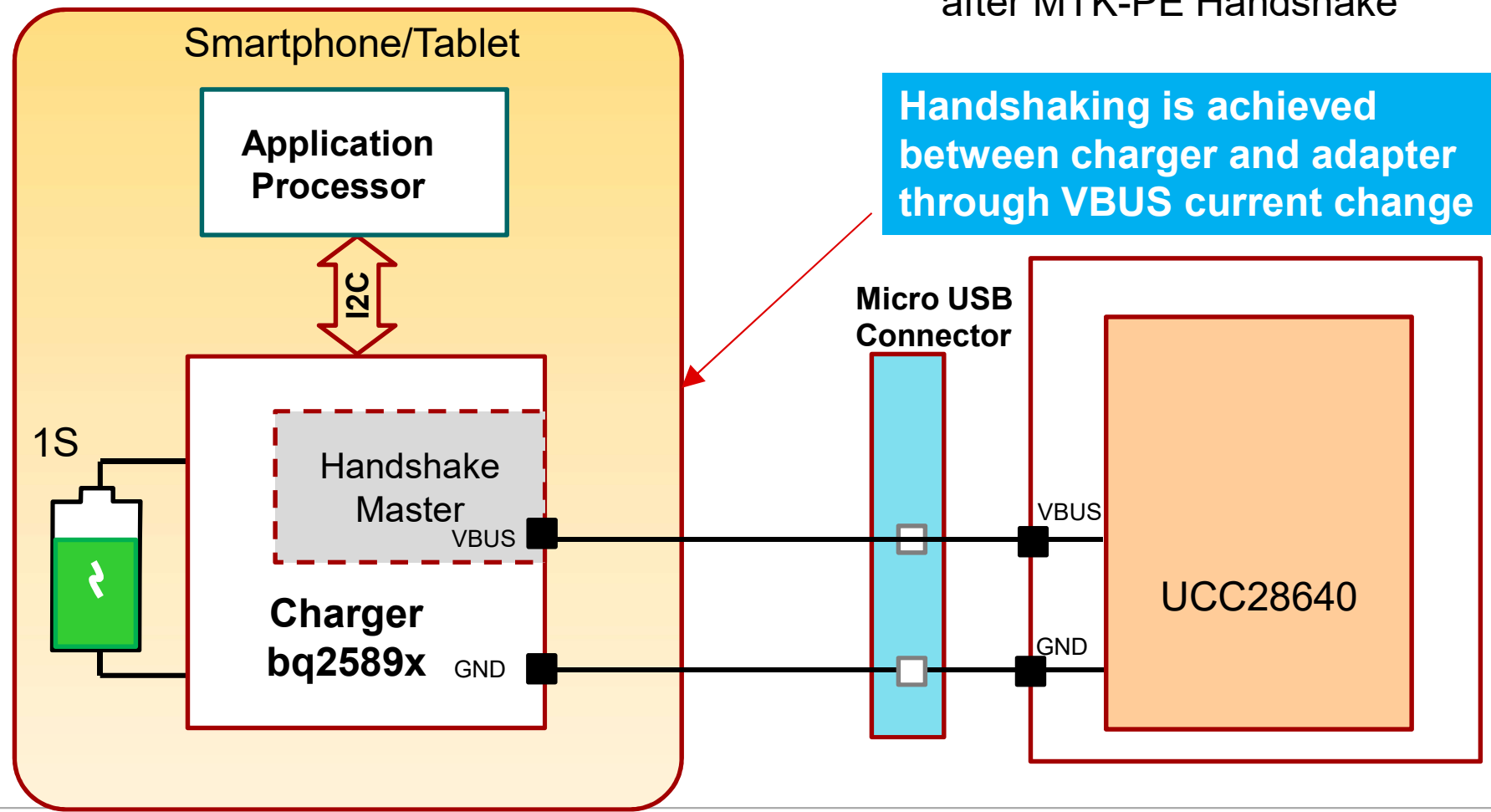
Evaluation Condition
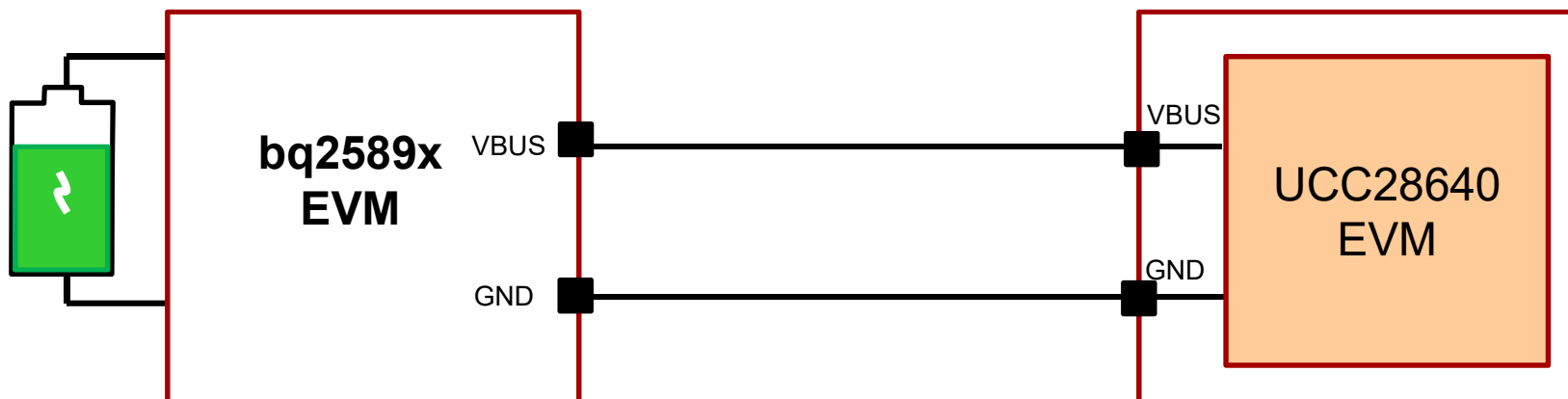
- Charge Current: 2.048A
- Battery Voltage: 3.8V

Register Bits for PE+ Control:

- *EN_PUMPX* (REG04[7]): 0 –Disable (default); 1 –Enable
- *PUMPX_UP* (REG09[1]): 0 – Disable; 1 – Enable PE+ Voltage Up
- *PUMPX_DN*(REG09[0]): 0 – Disable; 1 – Enable PE+ Voltage Down

* Host must ensure PUMPX_UP and PUMPX_DN bits are not set while one of the sequences is in operations. The full sequence takes about 2.1s to complete.
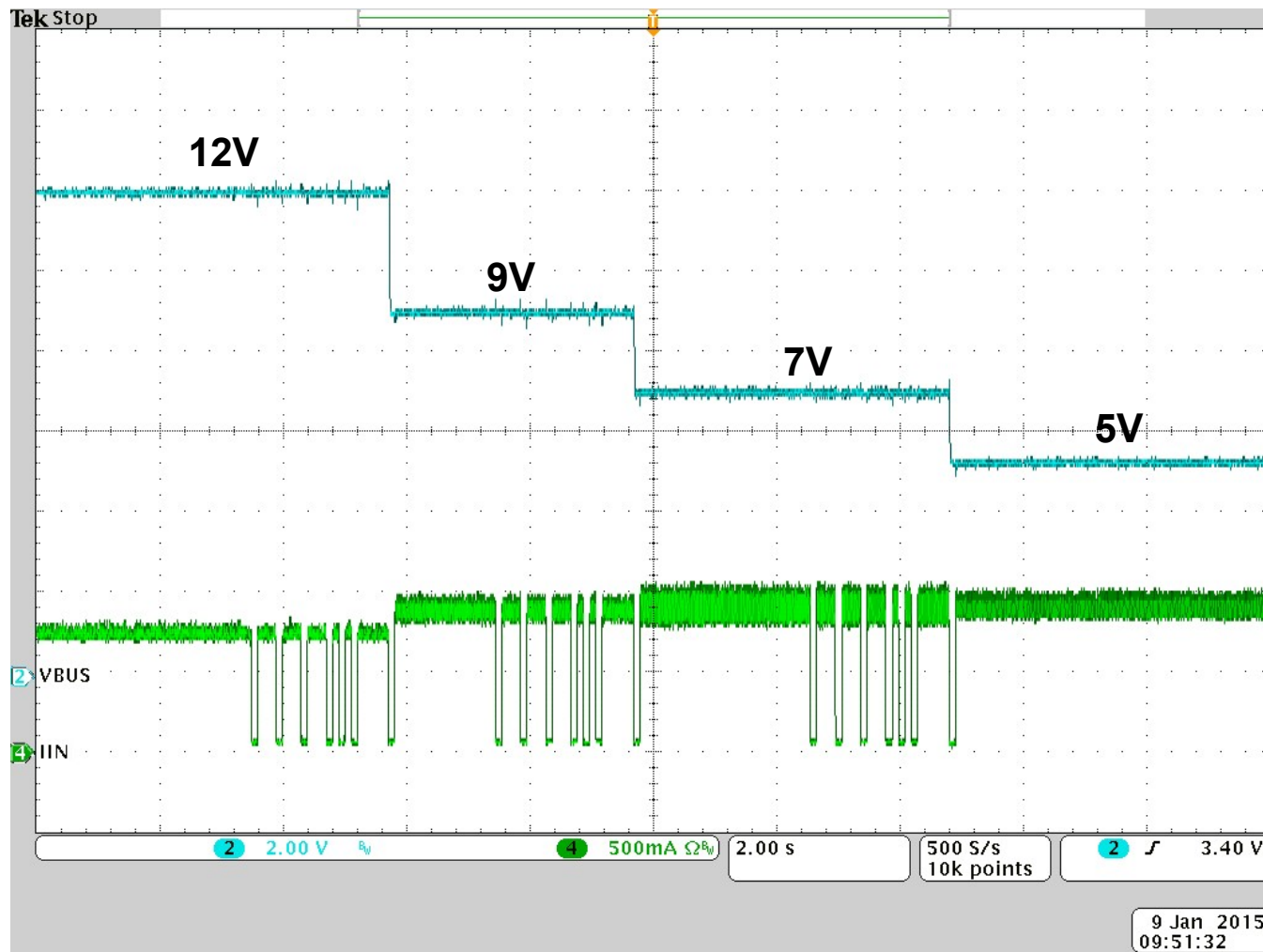
TEXAS INSTRUMENTS

PE+ Adaptor Voltage Up
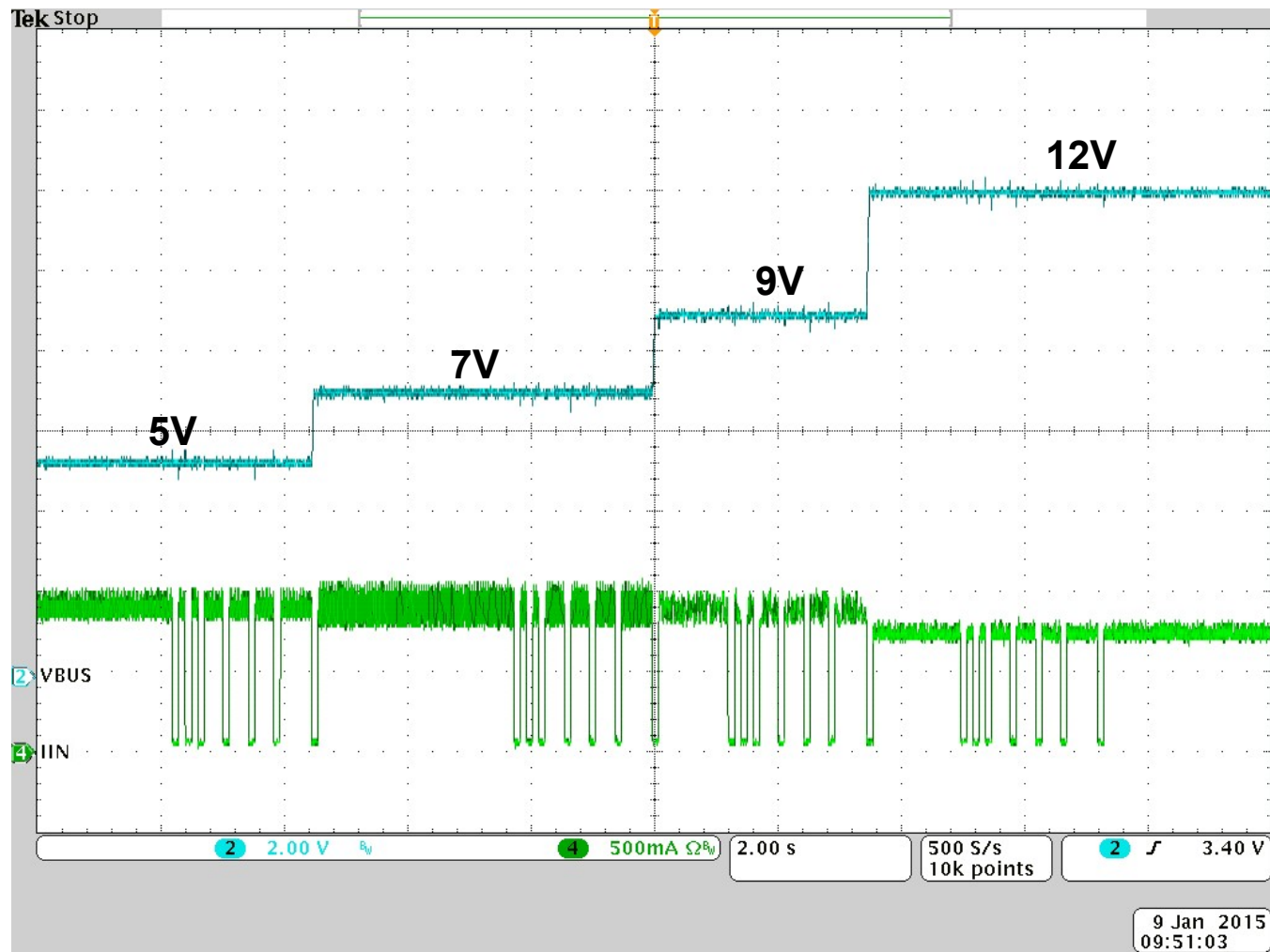
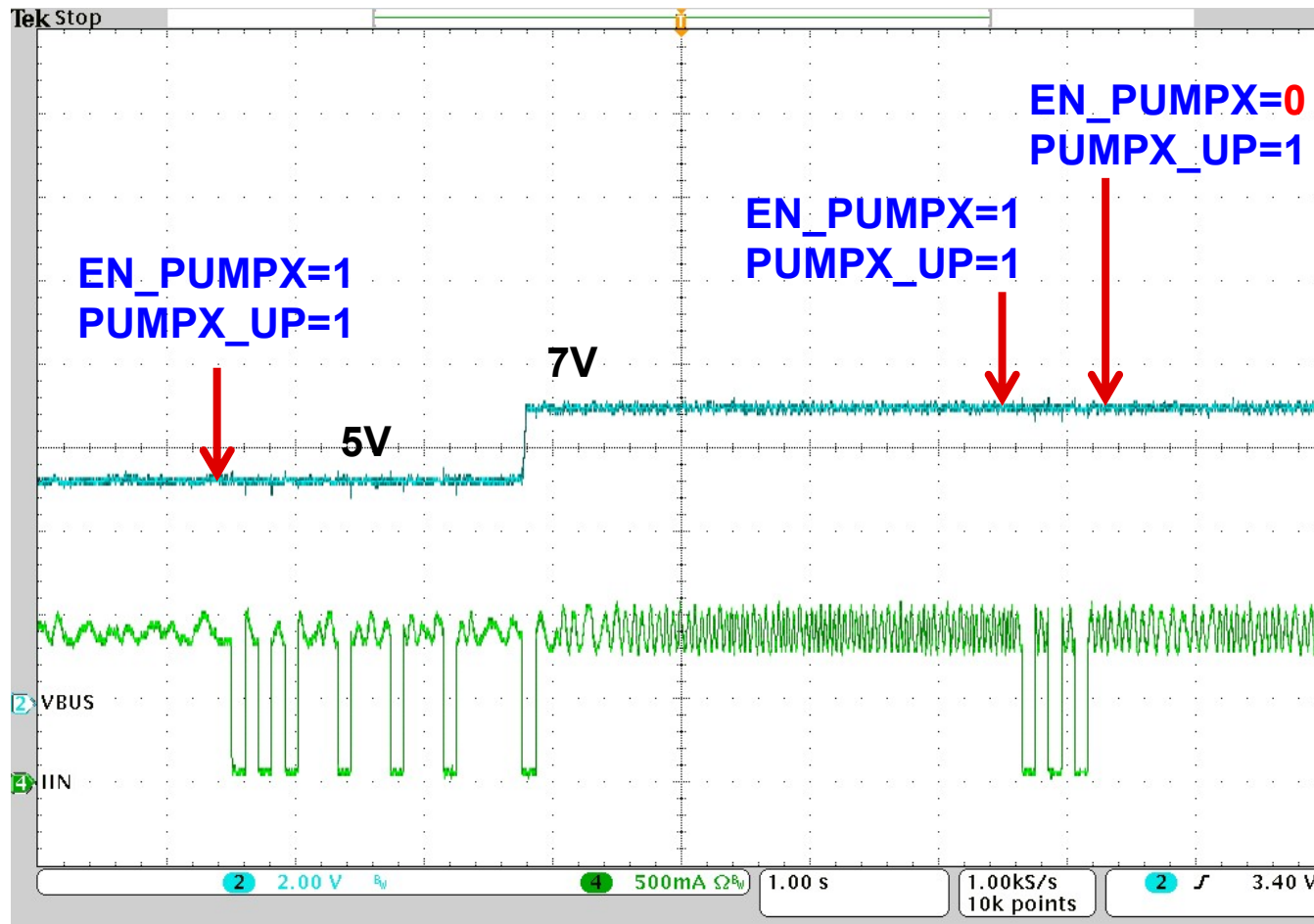

Adaptor Voltage: 5V (default) → 7V → 9V → 12V

TEXAS INSTRUMENTS

PE+ Adaptor Voltage Down

Adaptor Voltage: 12V → 9V → 7V → 5V

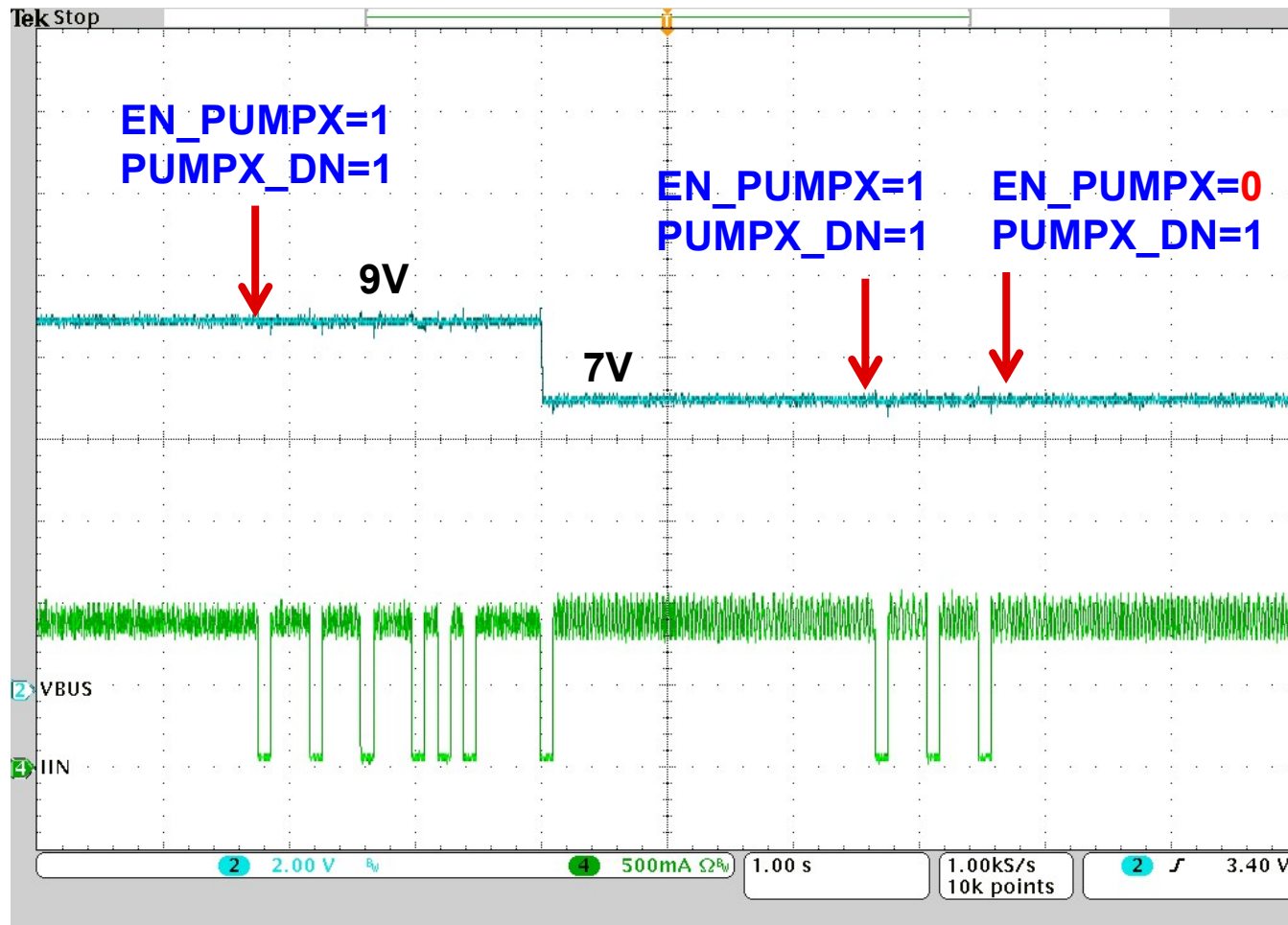TEXAS INSTRUMENTS

Stop Voltage Up During Operation

Adaptor voltage not goes up when EN_PUMPX is disabled even the voltage up process has started.

TEXAS INSTRUMENTS

Stop Voltage Down During Operation

Adaptor voltage not goes down when EN_PUMPX is disabled even the voltage down process has started.

TEXAS INSTRUMENTS