



**XILINX**

**ALL PROGRAMMABLE™**

## **KC705 Power Bus Reprogramming**

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# Caution!

- The Texas Instruments software used in this presentation can adjust the power supply outputs on the KC705
- If used improperly, it may seriously damage your KC705
- Before making any adjustments not specifically covered in this presentation:
  - Understand the power requirements for Kintex-7 Devices
  - Understand the consequences of the change you are making



# Xilinx KC705 Board



# Hardware Requirements

## ➤ Texas Instruments USB Interface Adapter EVM

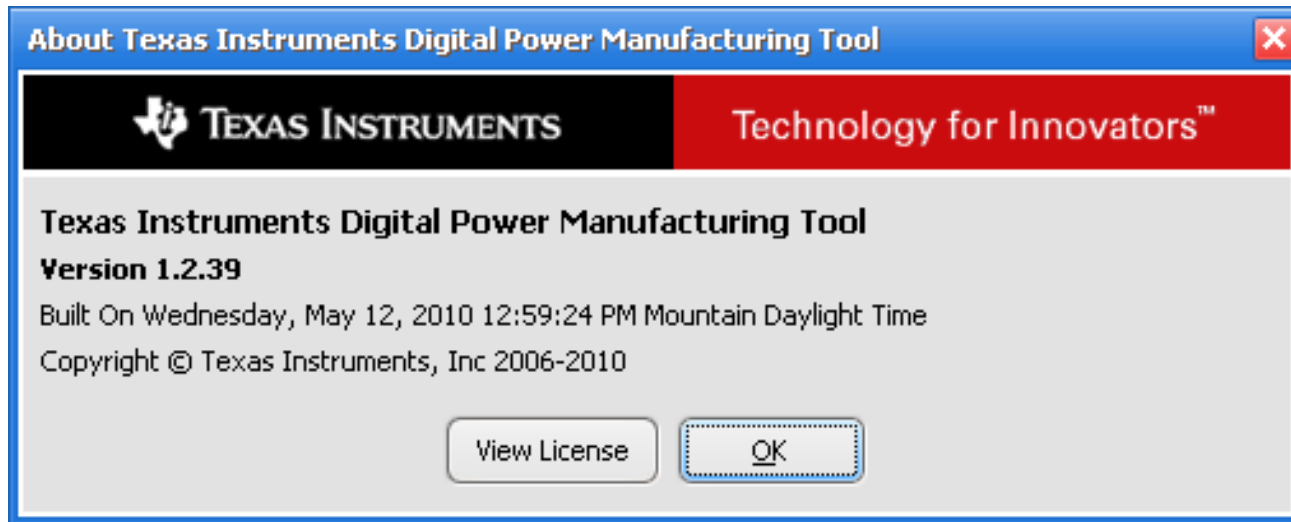
– TI Part Number: [USB-TO-GPIO](#)



# Software Requirements

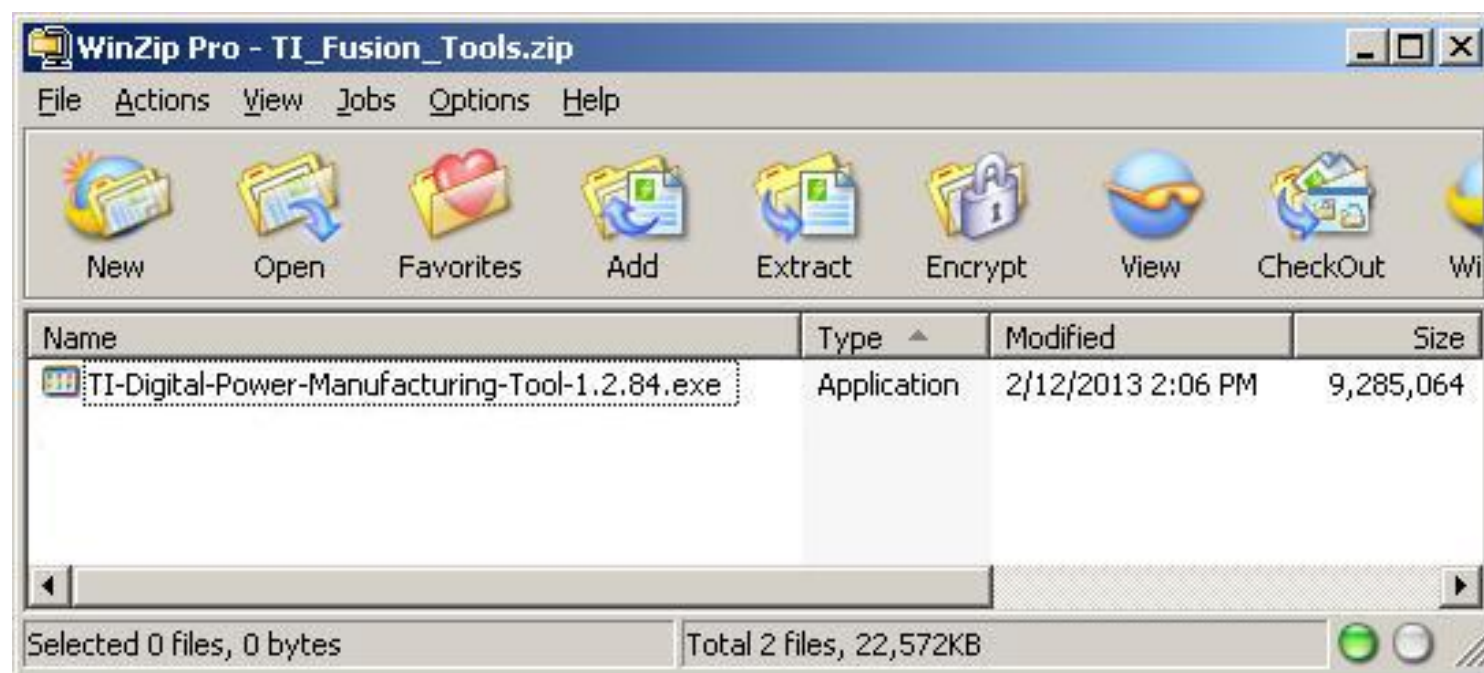
## ➤ Texas Instruments Power Software

- TI Part Number: [FUSION\\_MFR\\_GUI](#)
- Download: Latest Release at [http://www.ti.com/tool/fusion\\_mfr\\_gui](http://www.ti.com/tool/fusion_mfr_gui)



# Software Setup

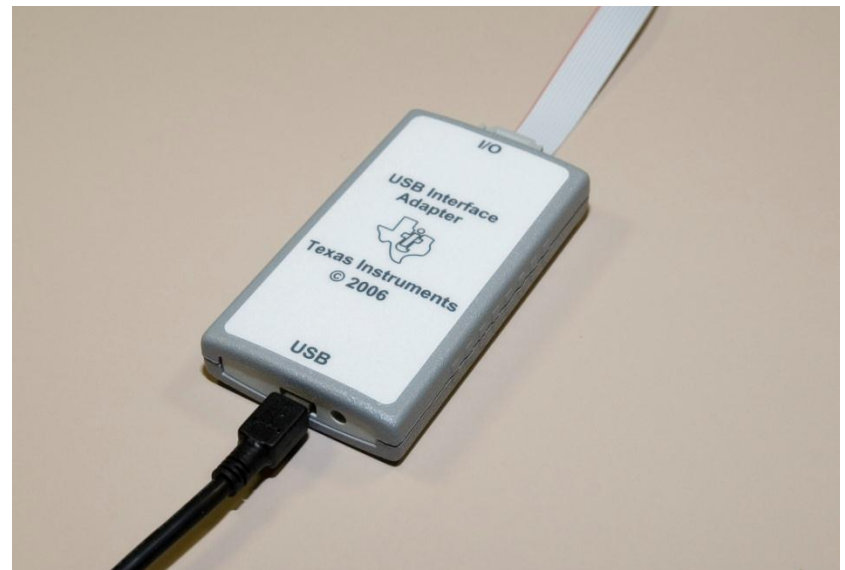
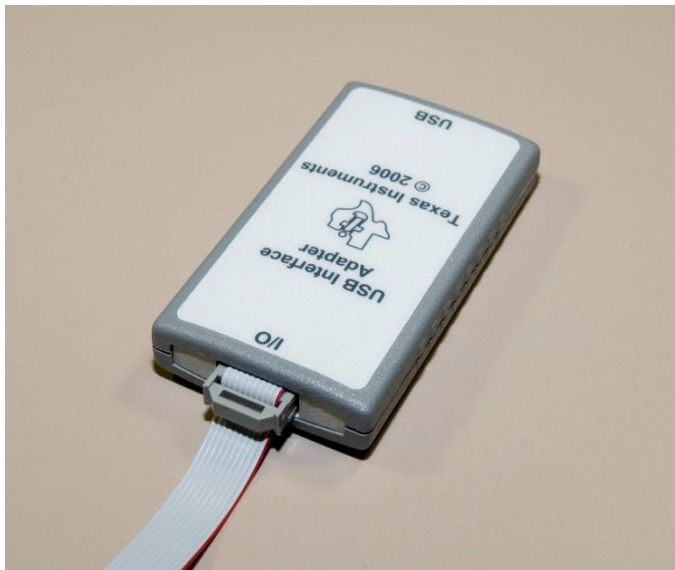
## ➤ Install the TI Fusion Digital Power Manufacturing Software



# Connect TI USB Interface Adapter

## ➤ On the TI USB Adapter

- Connect the Ribbon Cable
- Connect the USB Cable

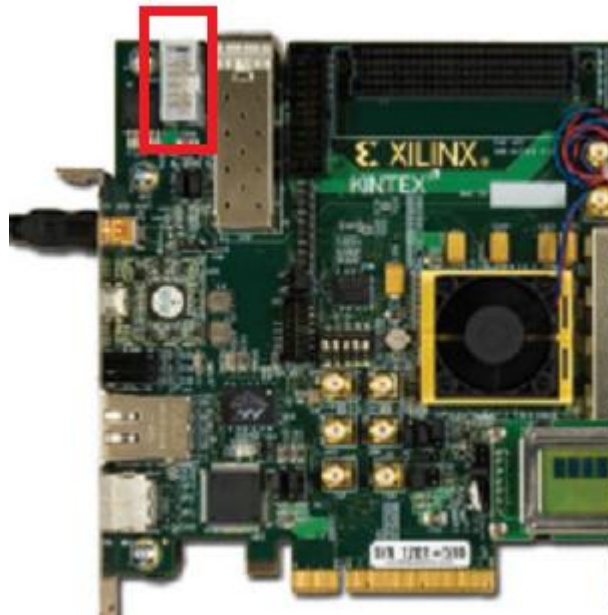




# Connect TI USB Interface Adapter (2)

## ➤ Connect the Ribbon Cable to the KC705

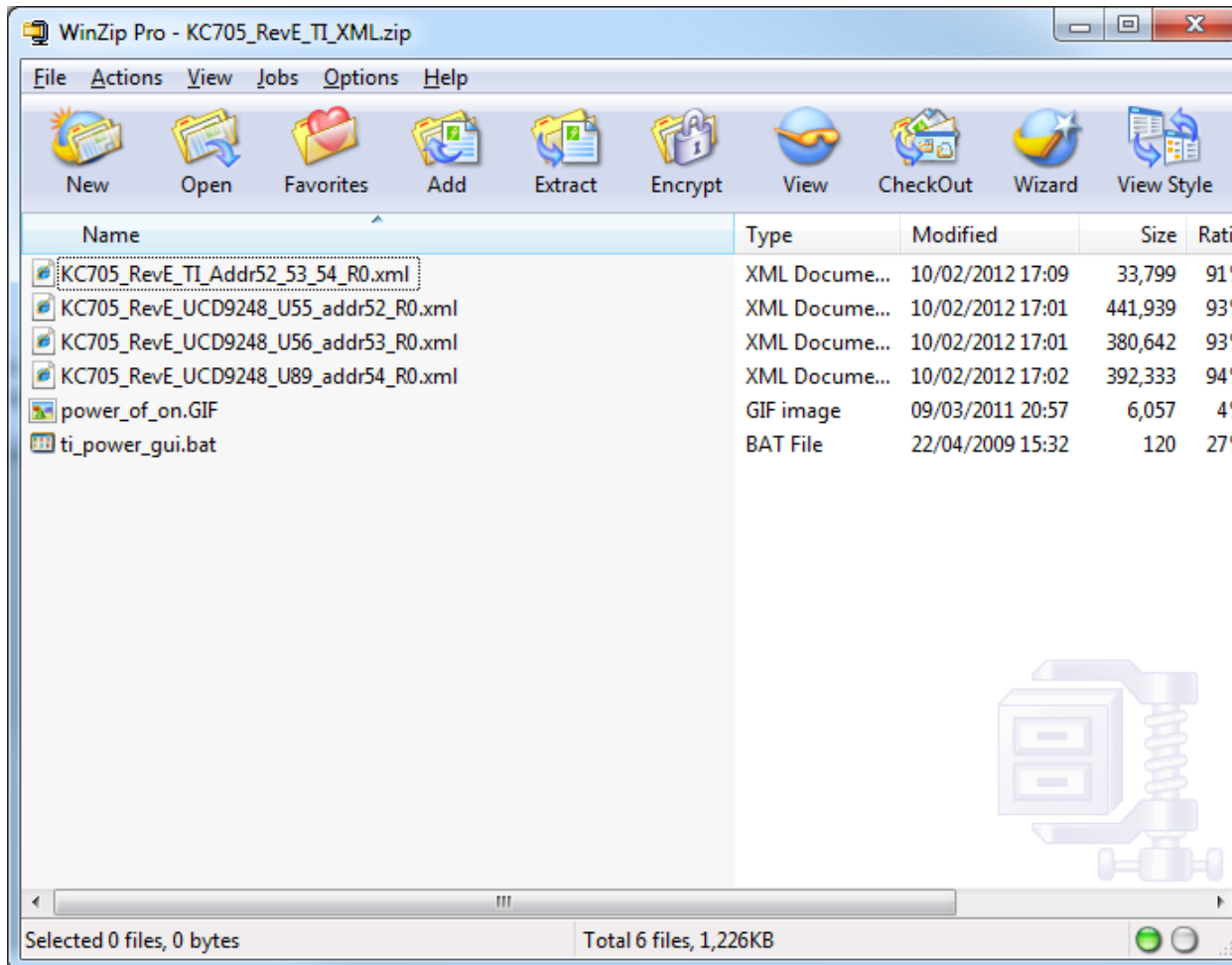
- Red Stripe towards pin 1



- Insert the “A” end of the USB cable into a PC USB port (do not use a docking station or USB hub port)
- Turn on the KC705 board

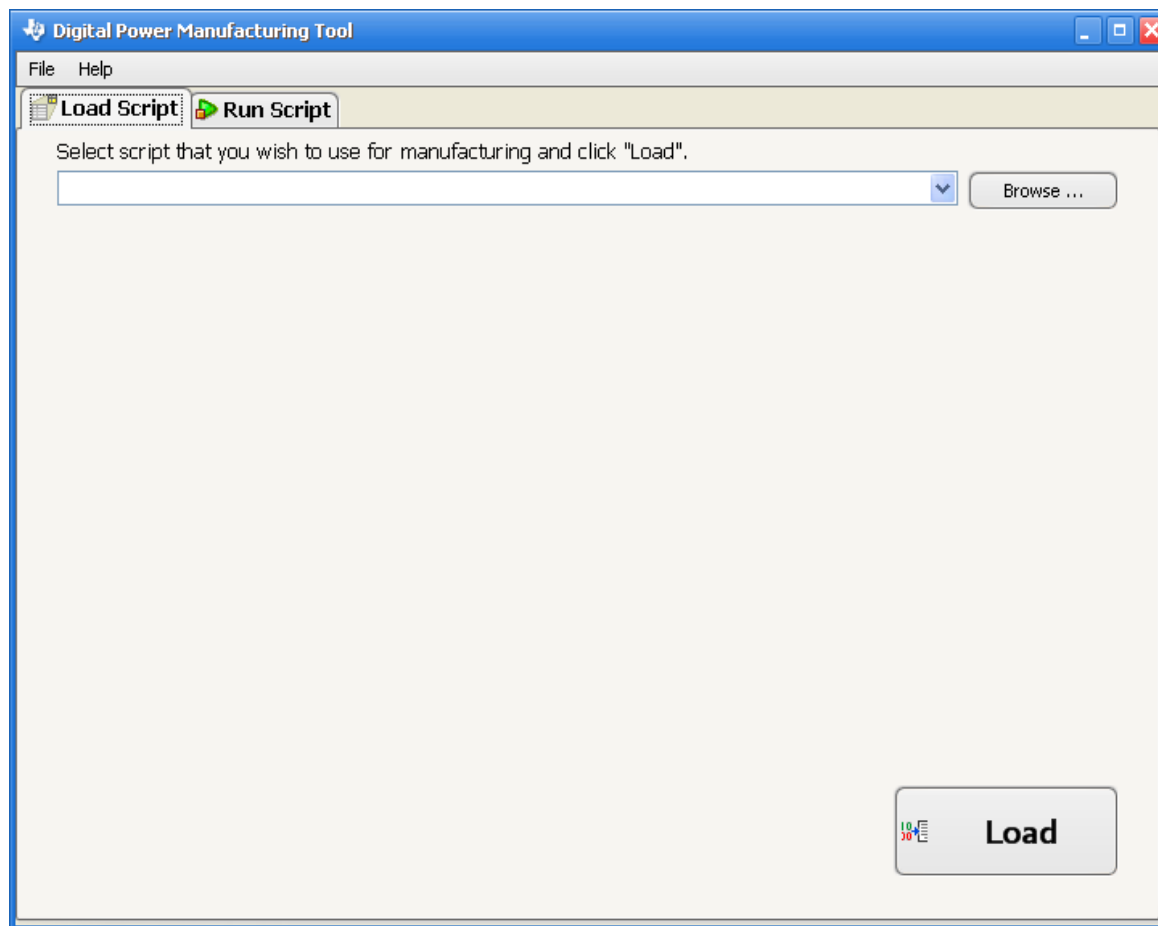
# Restoring Power Levels

➤ Unzip included file: KC705\_RevE\_TI\_XML.zip



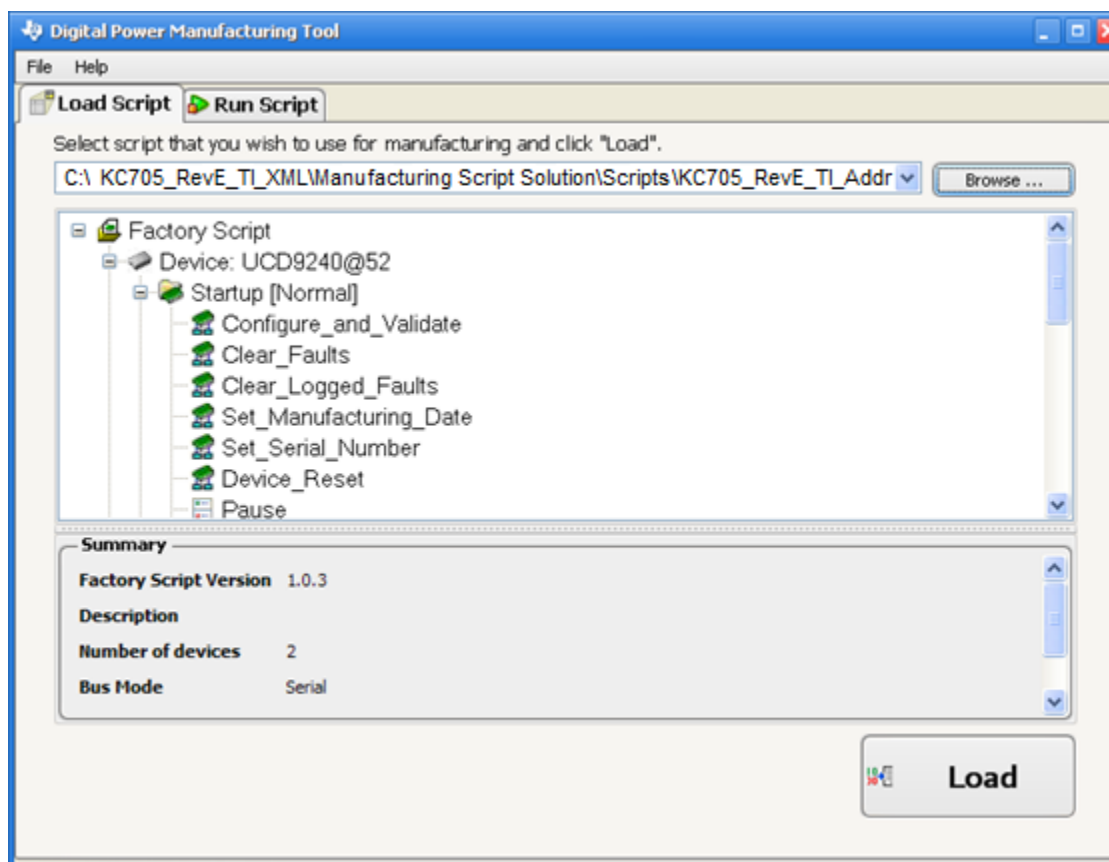
# TI Fusion Digital Power Manufacturing Tool

## ➤ Open Manufacturer's GUI



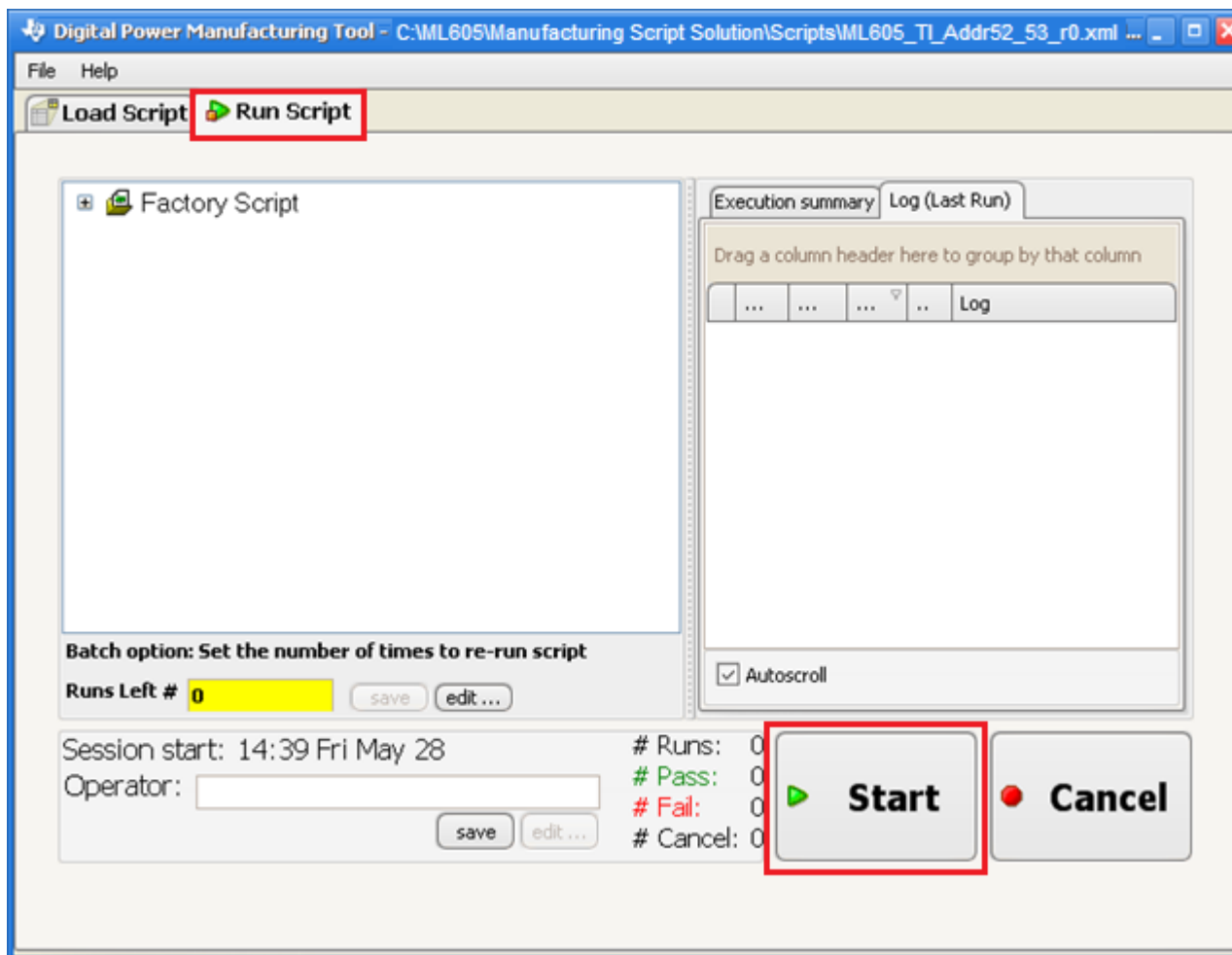
# TI Fusion Digital Power Manufacturing Tool

- Load xml script from KC705\_RevE\_TI\_XML.zip directory
  - Manufacturing Script  
Solution/Scripts/KC705\_RevE\_TI\_Addr52\_53\_54\_R0.xml



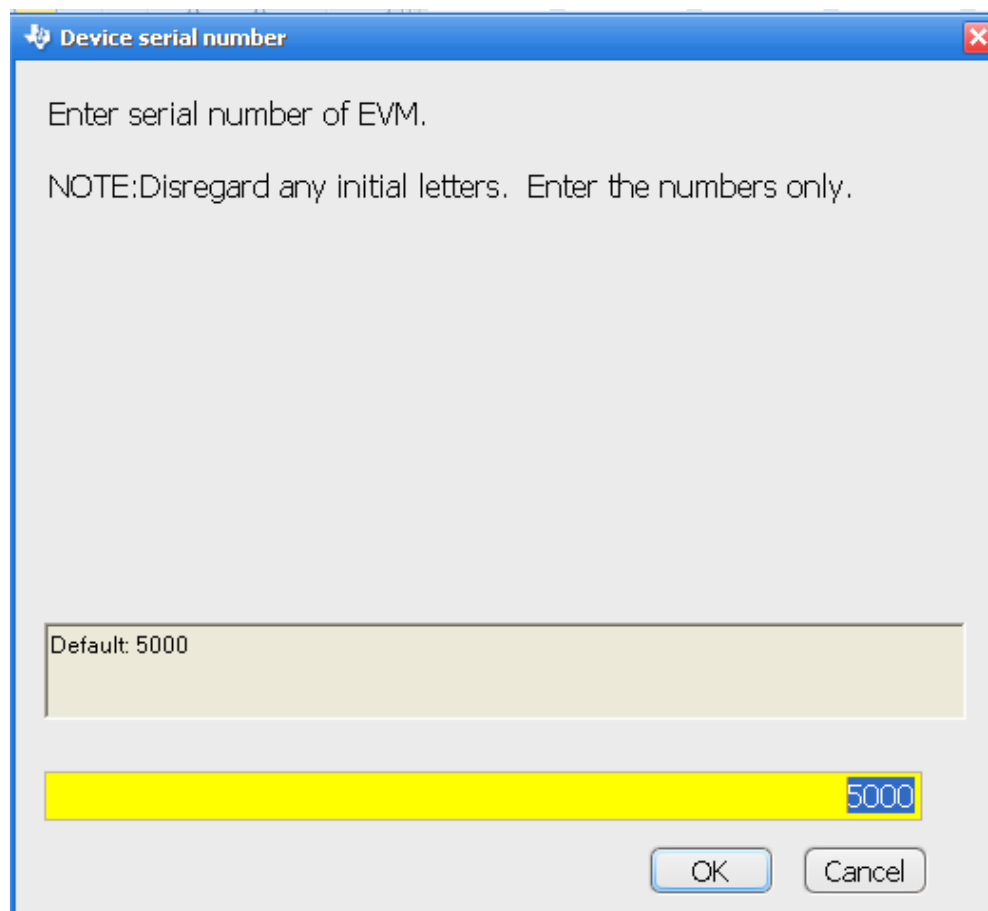
# TI Fusion Digital Power Manufacturing Tool

➤ Click Run Script tab and then Start



# TI Fusion Digital Power Manufacturing Tool

- Operator ID is irrelevant
- Click OK and wait for the board to finish programming
- Default Serial number can remain as is also



# TI Fusion Digital Power Manufacturing Tool

➤ Finished!

Digital Power Manufacturing Tool - C:\ML605Manufacturing Script Solution\Scripts\ML605\_TI\_Addr52\_53\_r0.xml ...

File Help

Load Script Run Script

- ✓ Startup [Normal]
  - ✓ Configure\_and\_Validate
- ✓ Validation [Normal]
  - ✓ Clear\_Faults
  - ✓ Clear\_Logged\_Faults
  - ✓ Set\_Manufacturing\_Date
  - ✓ Device\_Reset
  - ✓ Pause
  - ✓ Validate\_Vout\_Device\_All\_Rails
- ✓ End [Normal]
  - ✓ Clear\_Faults
  - ✓ Clear\_Logged\_Faults

Batch option: Set the number of times to re-run script

Runs Left # 0 [save] [edit ...]

Session start: 14:39 Fri May 28 # Runs: 5  
Operator: Amanda # Pass: 1  
# Fail: 4  
# Cancel: 0

[Start] [Cancel]

**Manufacturing Passed**

Execution summary Log (Last Run)

Drag a column header here to group by that column

..	...	...	.	Log
1...	GE...	IN...	n...	UCD9240@53.End END attempt: 0/0 (3484.4642ms) PASS
1...	GE...	IN...	n...	UCD9240@53 END attempt: 0/0 (15172.2634ms) PASS
▶ 1...	GE...	IN...	n...	Factory Script END attempt: 0/0 (34532.134ms) PASS

Autoscroll