

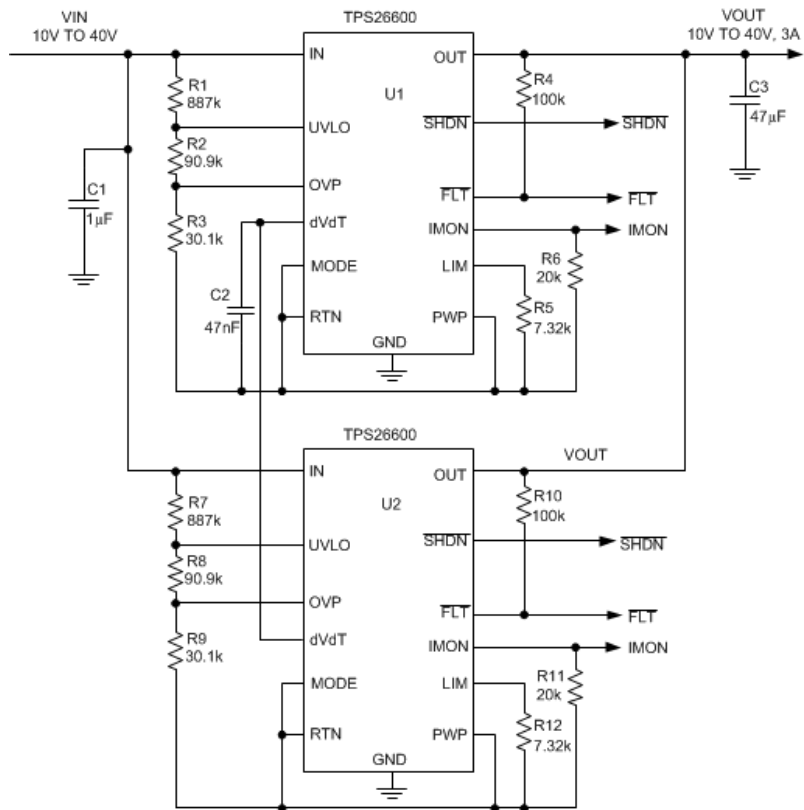
TPS26600 Parallel Operation

Venkata Nandam

Power Switches

Feb 2017

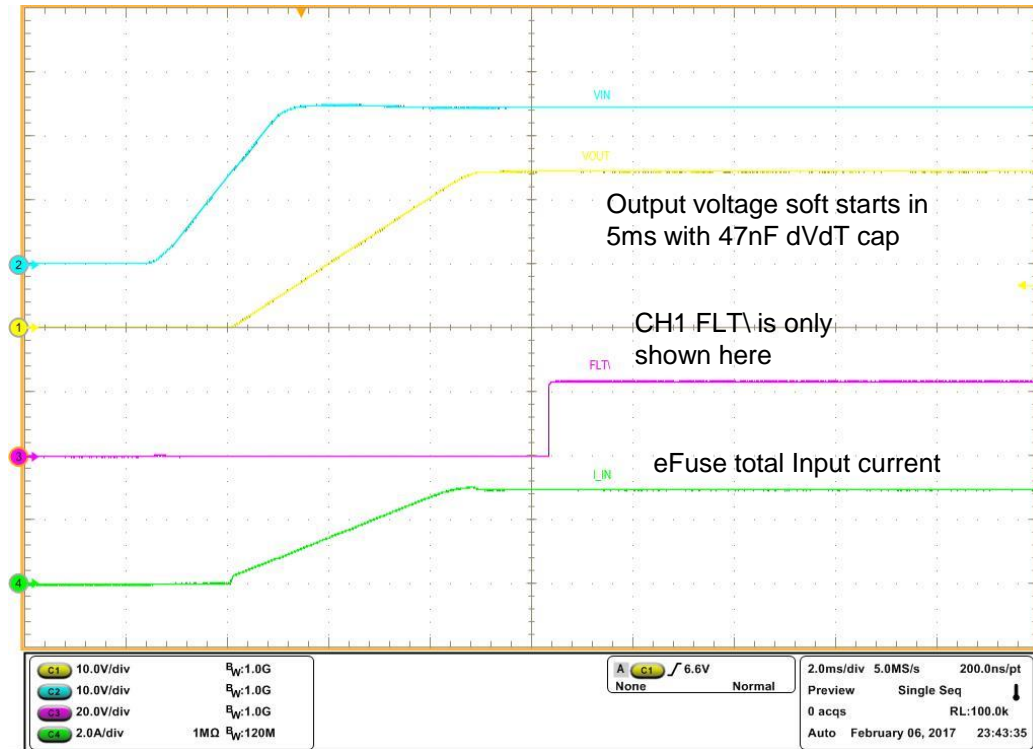
3A - TPS26600 eFuse Schematic



TI Information – Selective Disclosure

Turn on with VIN

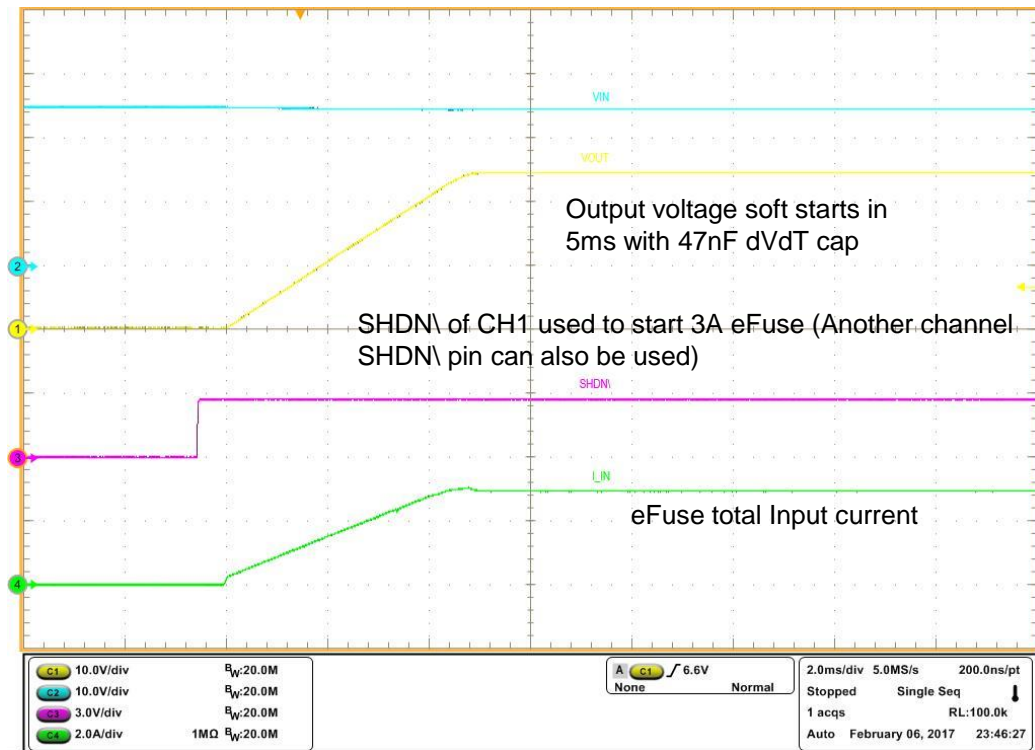
Test Conditions : Vin=24V, 3A Resistive Load, Cout = 47uF



TI Information – Selective Disclosure

Turn on with SHDN\

Test Conditions : $V_{in}=24V$, 3A Resistive Load, $C_{out} = 47\mu F$

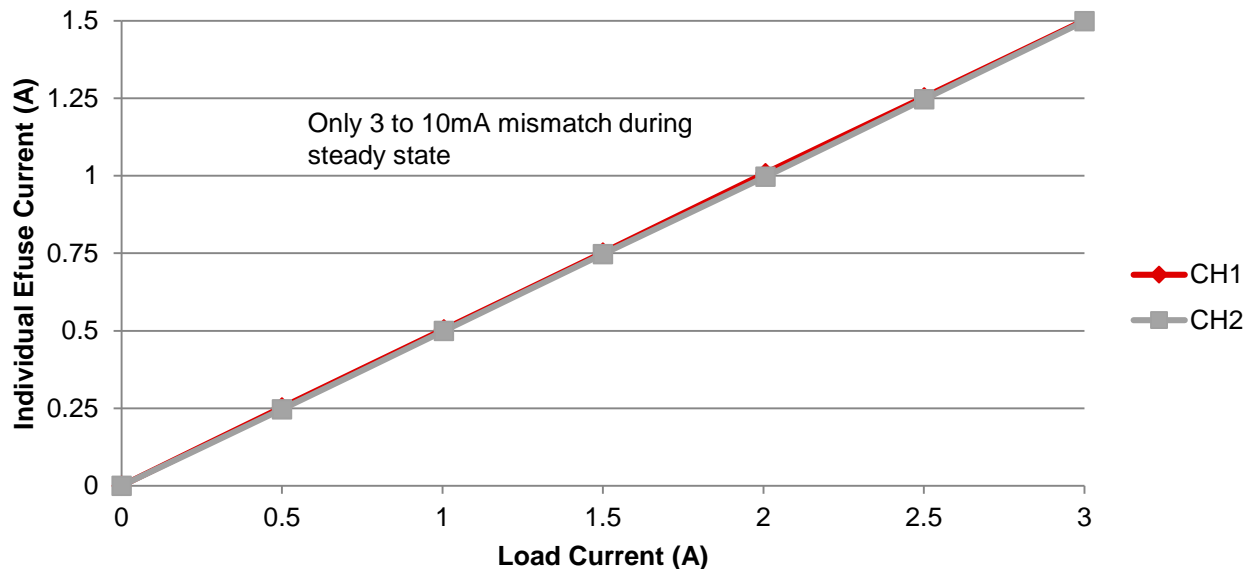


TI Information – Selective Disclosure

Current Sharing During Steady State

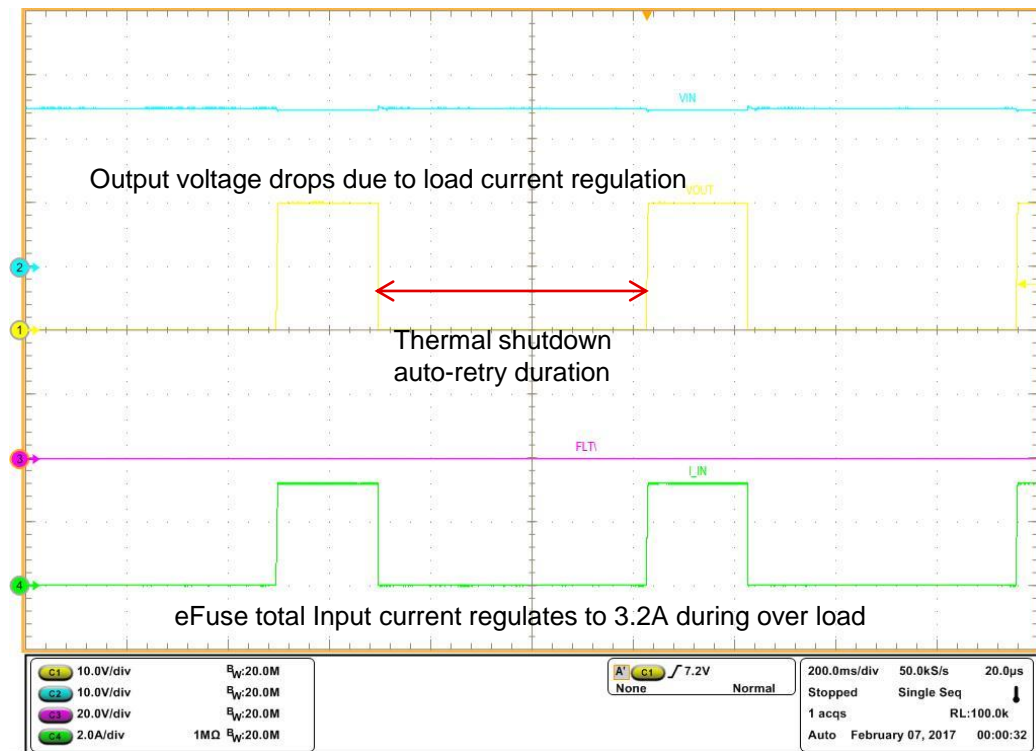
Test Conditions : $V_{in}=24V$, 0-3A Constant Current Load, $C_{out} = 47\mu F$

Load Current Sharing in Efuses



Over Load Response

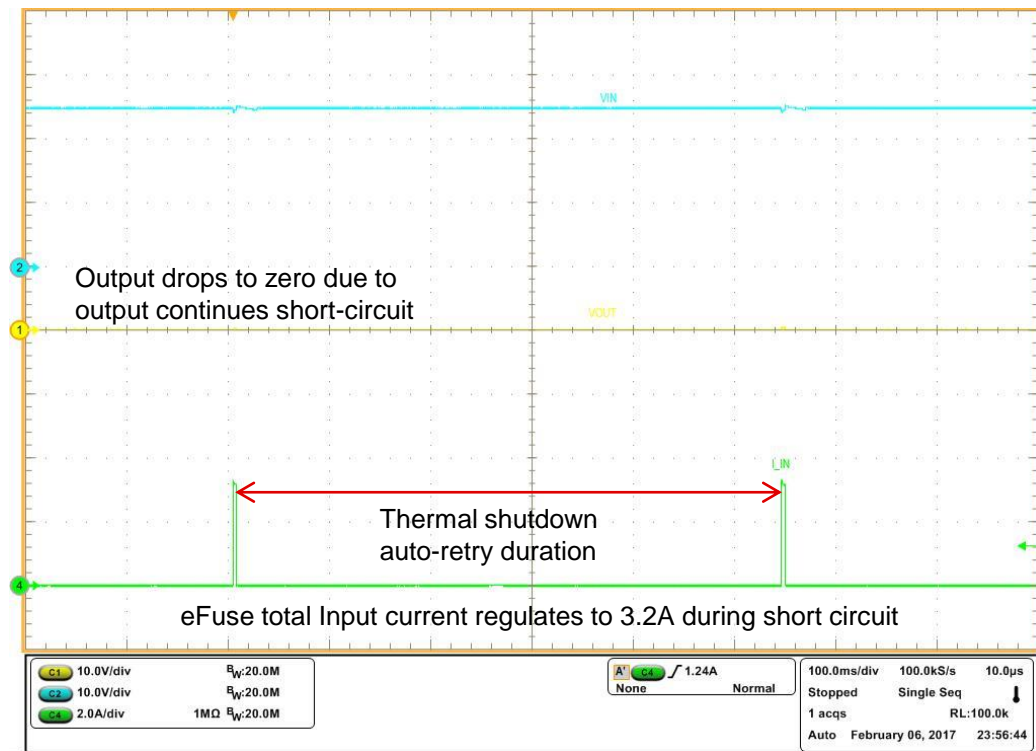
Test Conditions : $V_{in}=24V$, 6Ω Resistive Load, $C_{out} = 47\mu F$



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Output Continuous Short-circuit Response

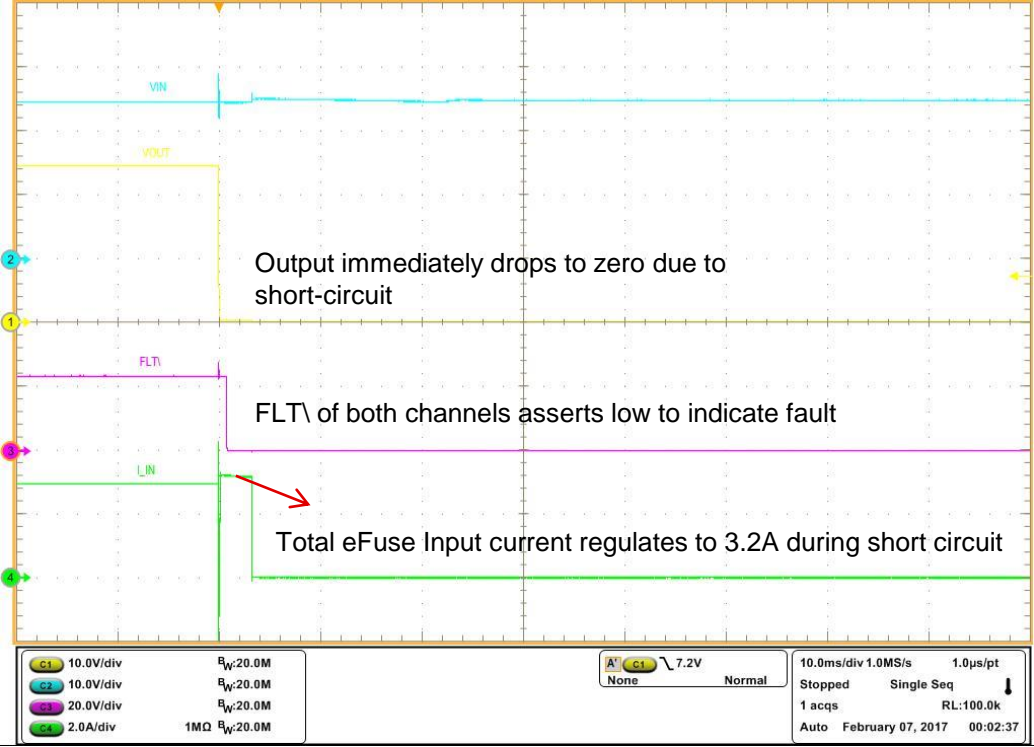
Test Conditions : $V_{in}=24V$, 0Ω Resistive Load, $C_{out} = 47\mu F$



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Response at the instance of Short-circuit

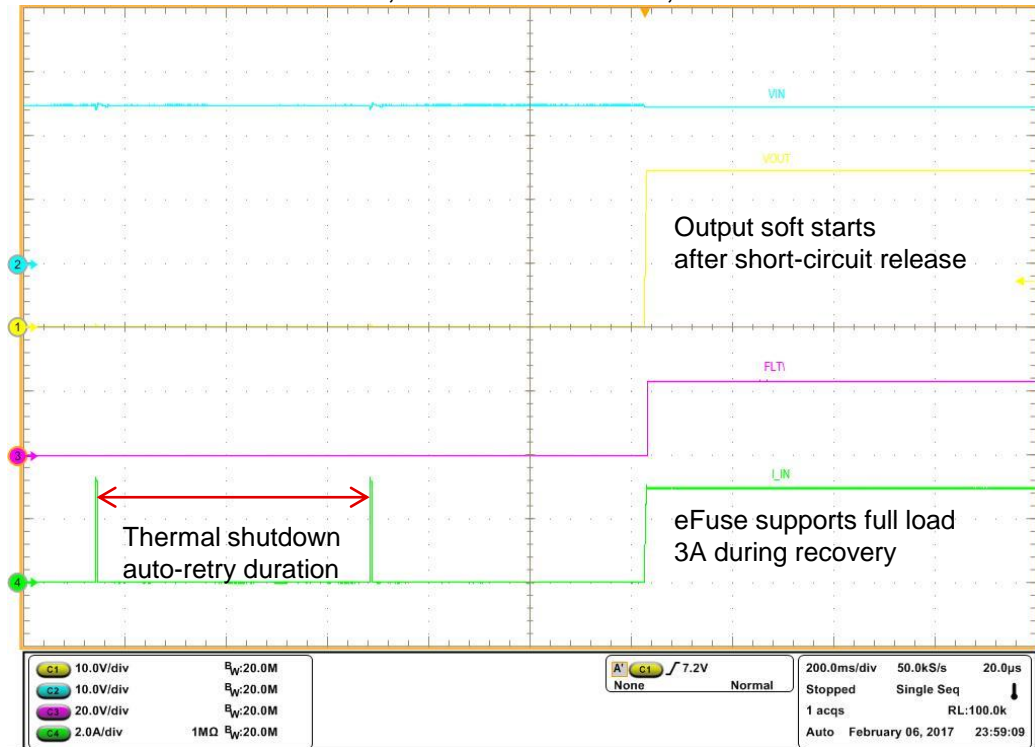
Test Conditions : $V_{in}=24V$, 0Ω Resistive Load, $C_{out} = 47\mu F$



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Recovery from Short-circuit Response

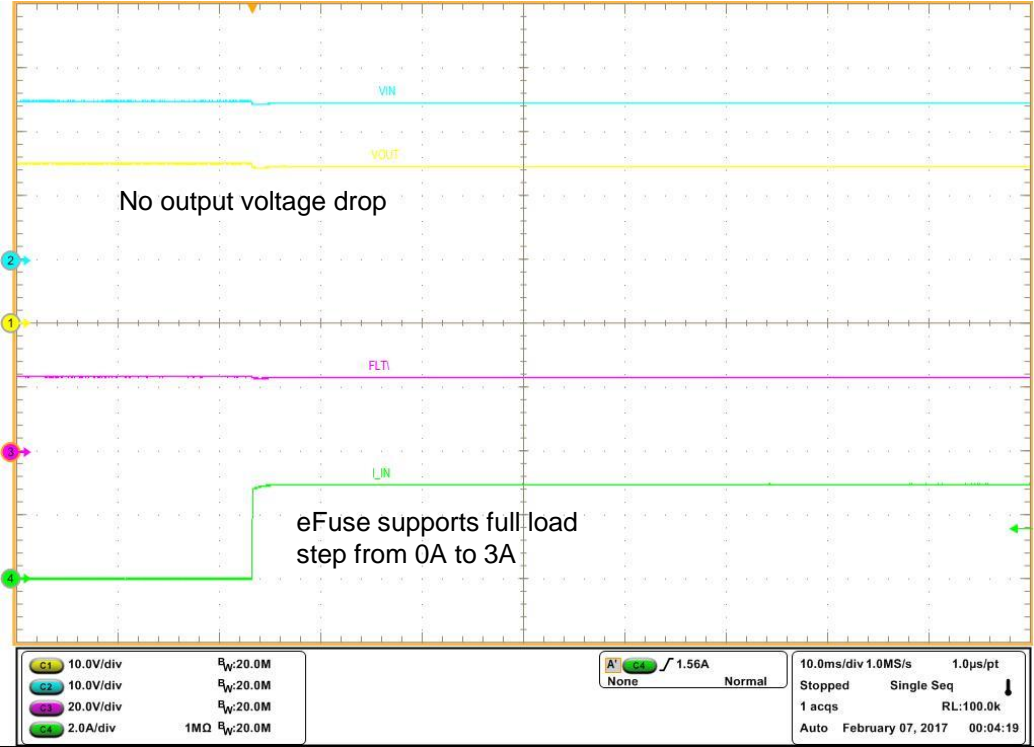
Test Conditions : $V_{in}=24V$, 0Ω Resistive Load, $C_{out} = 47\mu F$



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Load Step Response

Test Conditions : $V_{in}=24V$, 0A to 3A Resistive Load, $C_{out} = 47\mu F$



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Resources

Achieve 20-A Circuit Protection and Space Efficiency Using Paralleled eFuses

<http://www.ti.com/lit/an/slva836/slva836.pdf>

Calculators, Spice models

<http://www.ti.com/product/TPS2660/toolssoftware>

Download EVM user's guide

<http://www.ti.com/tool/tps26600-02evm>