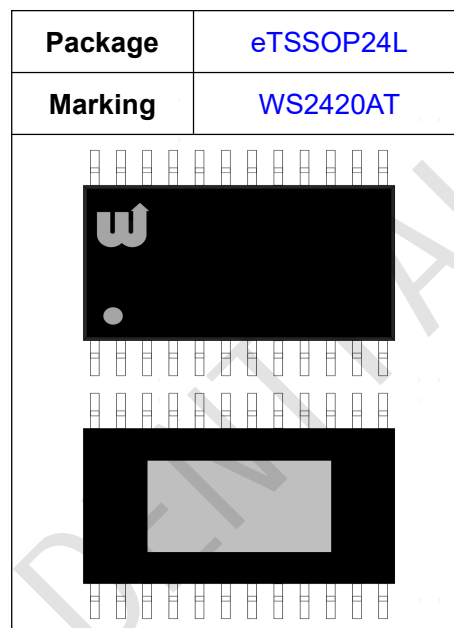


Application

- ◆ Fail operational power supply targeting high current applications
- ◆ Connection/isolation switch between power supplies (e.g. for hybrids and electric vehicles)
- ◆ Developed to support dependable power supply and distribution

Basic Features

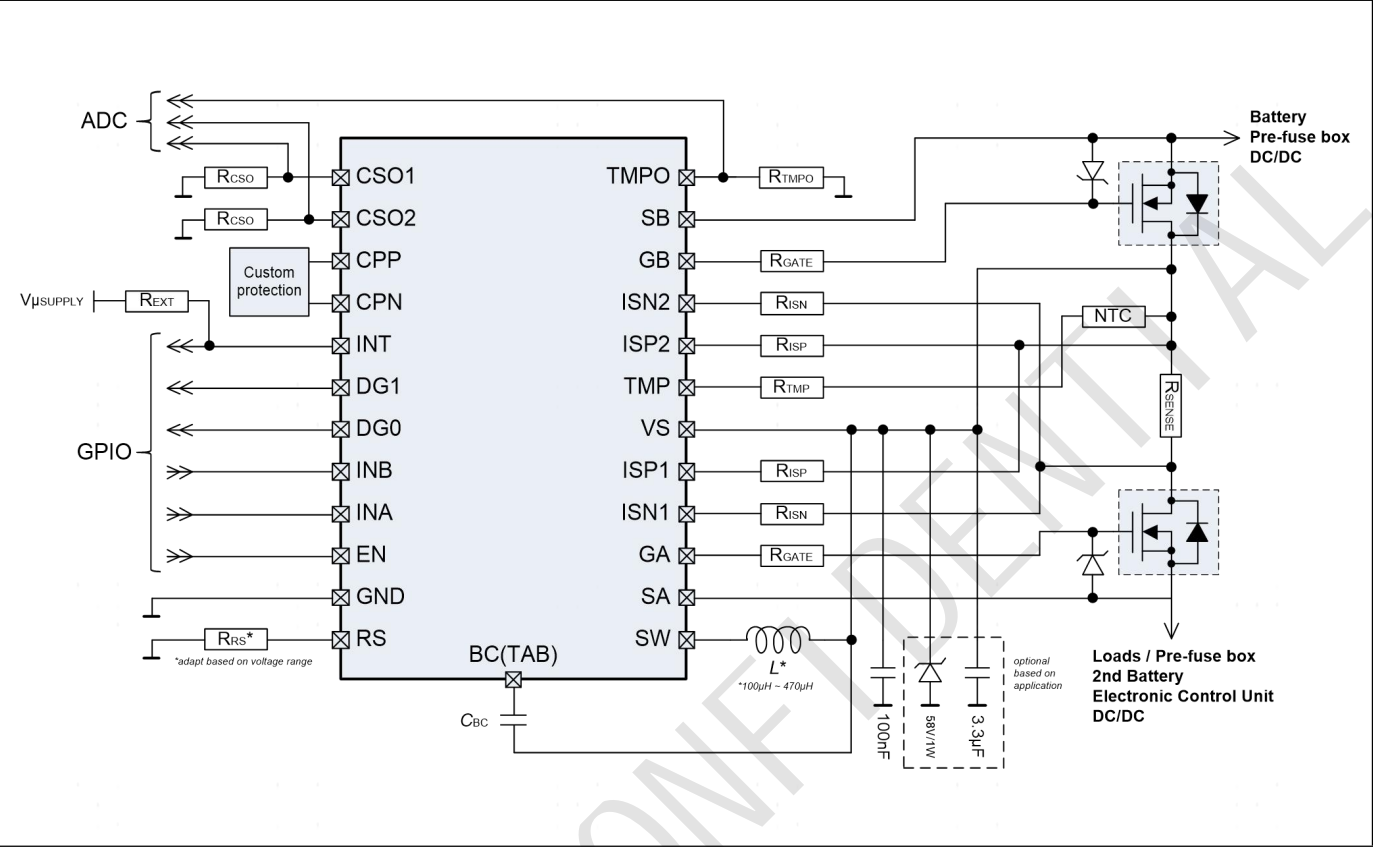
- ◆ ISO 26262-ready for supporting the integrator in evaluation of hardware element according to ISO 26262:2018 Clause 8-13
- ◆ Two channels device with two high-side gate driver outputs
- ◆ 3 Ω pull-down, 50 Ω pull-up for fast switch on/off
- ◆ Support back-to-back MOSFET topologies (common drain and common source)
- ◆ Two bidirectional high-side analog current sense interfaces with externally adjustable gain
- ◆ Adjustable overcurrent/short-circuit protection
- ◆ Versatile comparator to implement: adjustable I-t wire protection, overvoltage/undervoltage or overtemperature protection



Product Summary

Parameter	Symbol	Value
Max. transient supply voltage	V_S	58V
Voltage reference range for normal operation	$V_{S(NOR)}$	8-36V
Voltage reference extended range	$V_{S(EXT)}$	3-58V
CSA adjustable gain	G	10~200
Gate turn on short circuit pulsed current per gate	$I_{G(ON)}$	175mA
Gate turn-off short circuit pulsed current per gate	$I_{G(OFF)}$	1400mA
Turn on delay	$t_{D(ON)}$	4us @ $C_G=100nF$
Turn off delay	$t_{D(OFF)}$	4us @ $C_G=100nF$
GND current in SLEEP mode	$I_{GND+RS(SLEEP)}$	1~15uA
BC current in IDLE mode	$I_{BC(IDLE)}$	5~50uA

Typical Application Circuit



Ordering Information

Package	Top Mark	Part No.
eTSSOP24L, Pb-free	WS2420AT XXYMXX	WS2420AT