

Product brief

24V protected switches

The first fast low-side switch for 24 V applications

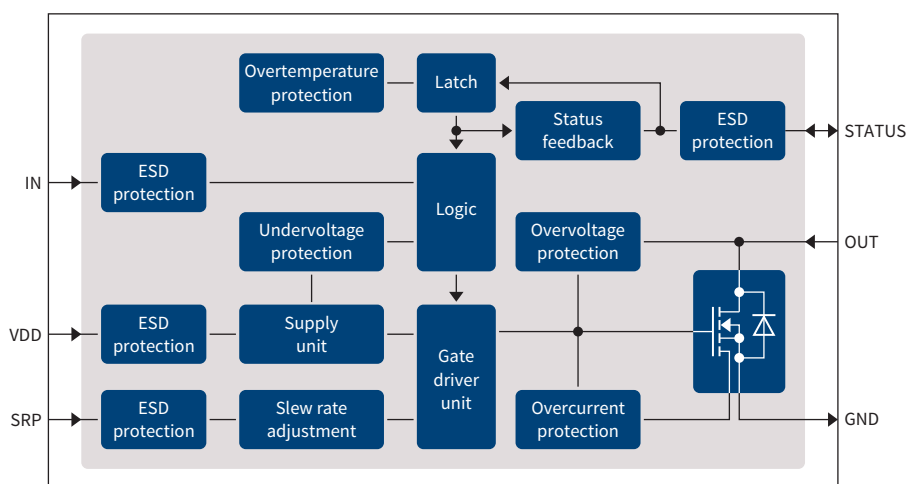
Infineon's PROFET™+ 24V (BTT6xxx & BTF6xxx) and HITFET™+ 24V (BTT3xxxEJ) enable to drive capacitive, inductive and resistive loads for any kind of 24 V applications (e.g. valves, bulbs, relays, motors, capacitors).

BTT3018EJ is Infineon's first low-side switch for 24 V applications, which is suitable for numerous fast, high frequency PWM applications (up to 20 kHz). The first HITFET™+ 24V is a 16 mΩ single channel smart low-side power switch. BTT3018EJ comes in a TDSO-8 exposed package providing embedded protective functions. The power transistor is built by a N-channel vertical power MOSFET.

HITFET™+ 24V and PROFET™+ 24V protected switches are automotive qualified and designed to be used for trucks, buses as well as Construction and Agricultural Vehicles (CAV) in harsh environment.

Customer can use the low-side and high-side switches in different topologies like half-bridge, dual switching mode.

Block diagram of the BTT3018EJ



Key features

- > Slew rate pin control for PWM
- > Diagnosis via STATUS pin
- > Temperature protection with latch shutdown

Key benefits

- > Power losses/EMI optimization with SRP pin
- > Reset of latch via status pin (configuration of IN to STATUS also possible)
- > High short circuit robustness

Key applications

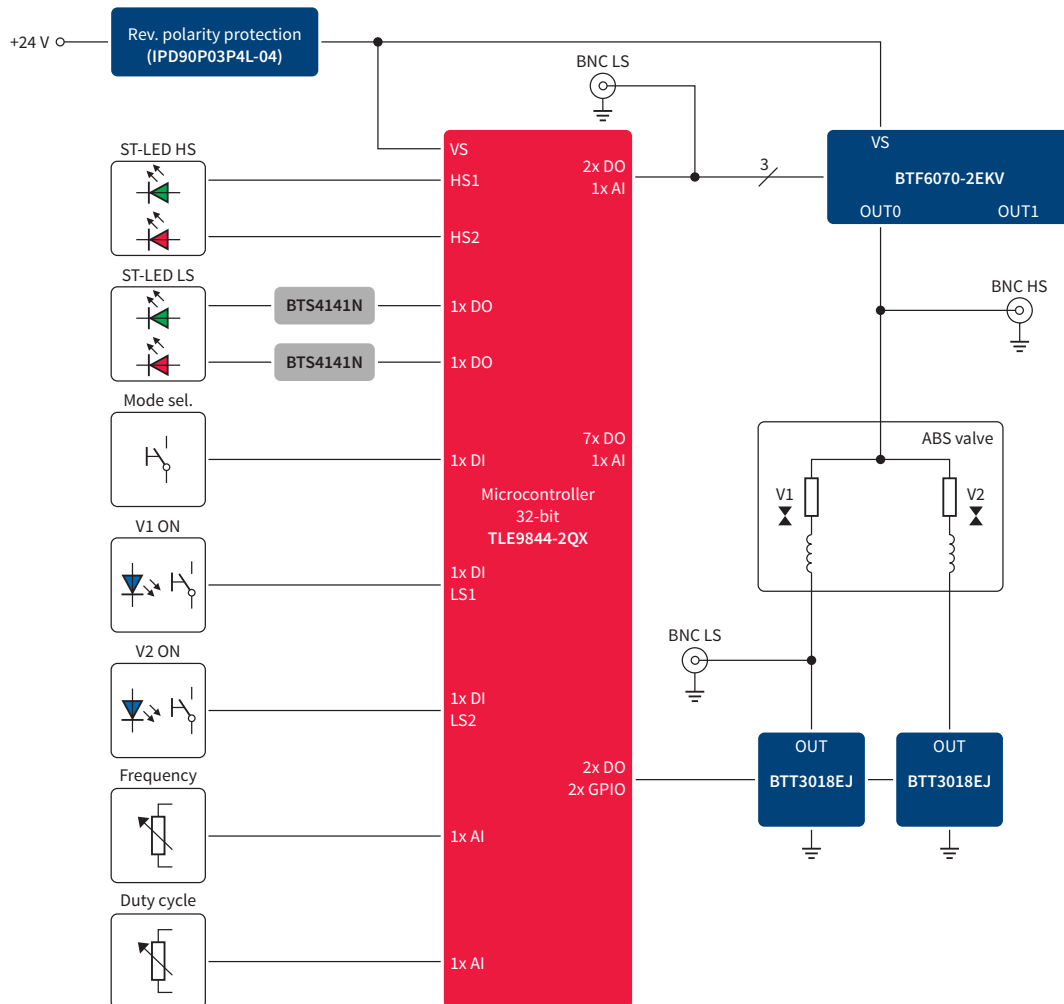
- > 24 V low-side and high-side loads
- > Suitable for automotive and industrial applications
- > All types of resistive, inductive and capacitive loads
- > Suitable for driving applications with high PWM (up to 20 kHz)



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Example for using BTT3018EJ and BTF6070-2EKV

Application diagram



Product table

Product name	OPN	$R_{DS(on)}$ (typ) @ 25°C [mΩ]	$R_{DS(on)}$ (max) @ 150°C [mΩ]	Channels	I_L (nom) [A]	I_L (lim) [A]	PWM [kHz]	Diagnostic	Package
BTT3018EJ	BTT3018EJXUMA1	16	38	1	7	30	up to 20	STATUS pin	TDSO-8

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