GreenChip SMPS Control IC

TEA1833LTS

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The TEA1833LTS is a low-cost Switched Mode Power Supply (SMPS) controller IC intended for flyback topologies. The TEA1833LTS operates in peak current and frequency control mode. Frequency jitter has been implemented to reduce Electromagnetic Interference (EMI). Slope compensation is integrated for Continuous Conduction Mode (CCM) operation.

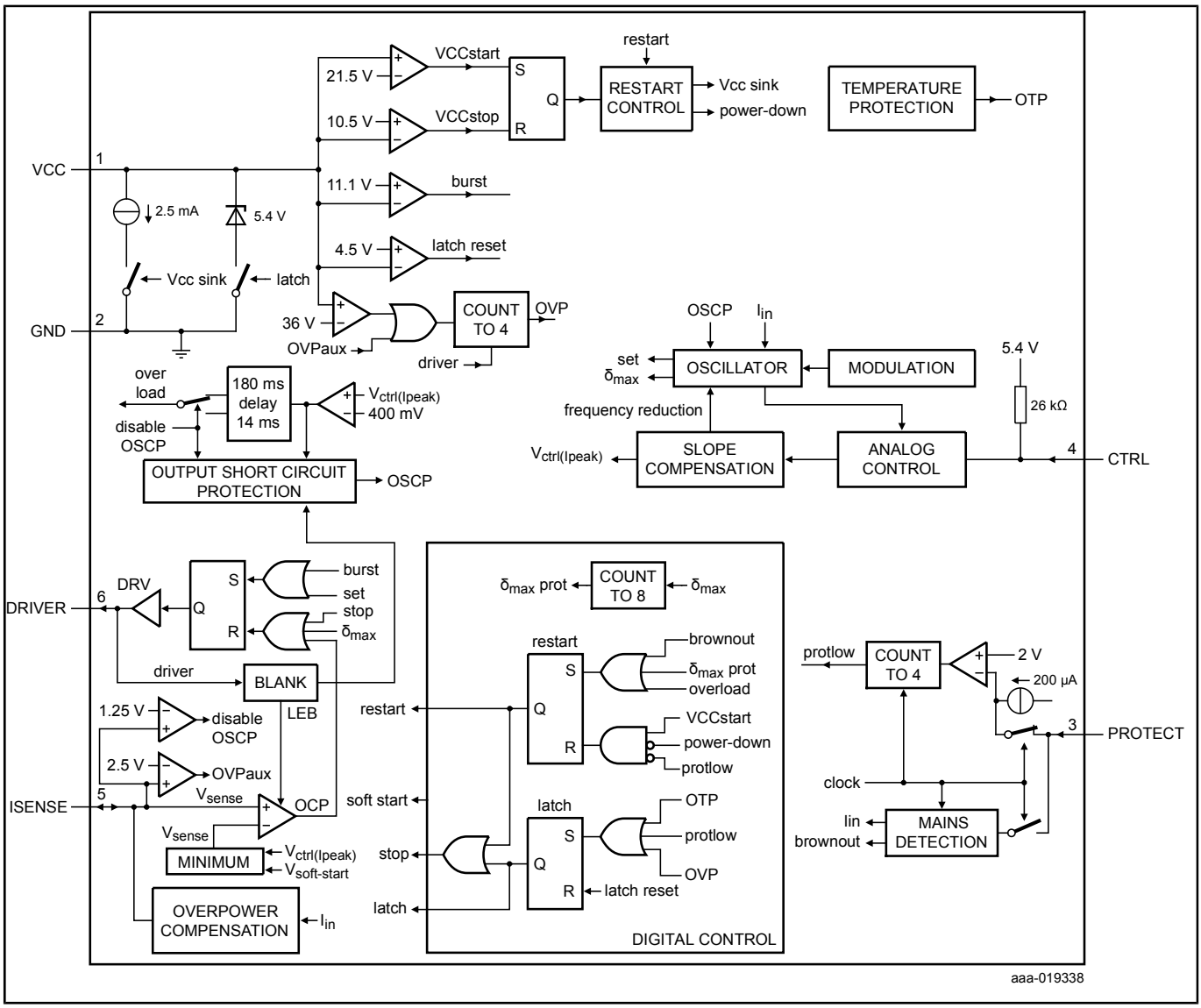
The TEA1833LTS IC features Over-Power Protection (OPP). The controller accepts an over-power situation up to 200 % for a limited amount of time.

Mains Under-Voltage Protection (brownin/brownout), output Over-Voltage Protection (OVP), and Over-Temperature Protection (OTP) can be implemented using a minimal number of external components.

At low-power levels, the primary peak current is set to 22 % of the maximum peak current. The switching frequency is reduced to limit the switching losses. The combination of fixed frequency operation at high output power and frequency reduction at low output power provides high efficiency over the total load range.

The TEA1833LTS makes the design of low-cost, highly efficient and reliable supplies easier by requiring a minimum number of external components. The device is especially suited for medium power applications.

TEA1833LTS Block Diagram Block Diagram



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Note: The information on this document is subject to change without notice.