

MLX74190

Two-Fold High Power Low Frequency Initiator with integrated Immobilizer

The MLX74190 low-frequency (LF) initiator IC consists of two fully integrated high power LF drivers with built-in immobilizers for passive RFID communication



Description

The main application for the MLX74190 is automotive remote passive start, where the IC transmits a high power LF telegram to wake-up the key inside the car enabling the engine to start. The MLX74190 also features built-in Immobilizers, used when the battery of the key is depleted.

The MLX74190 can also serve for a similar purpose with other vehicles such as; motorcycles, scooters, all-terrain vehicle, jet skis, snowmobiles and motorboats, where the key holder can be detected when approaching the engine and will be able to activate it from a "Start" button, or as a 'dead man switch' so that if the driver falls off then the engine is automatically cut. In addition it may be incorporated into building access systems, tire pressure monitoring system initiators and pet identification system.



Bus ICs

BLDC Motor Control ICs

Pressure Sensors

Wireless ICs

Hall Effect ICs And Sensors

Optoelectronic Sensors

Sensor Interface ICs

Infrared Sensors

Applications

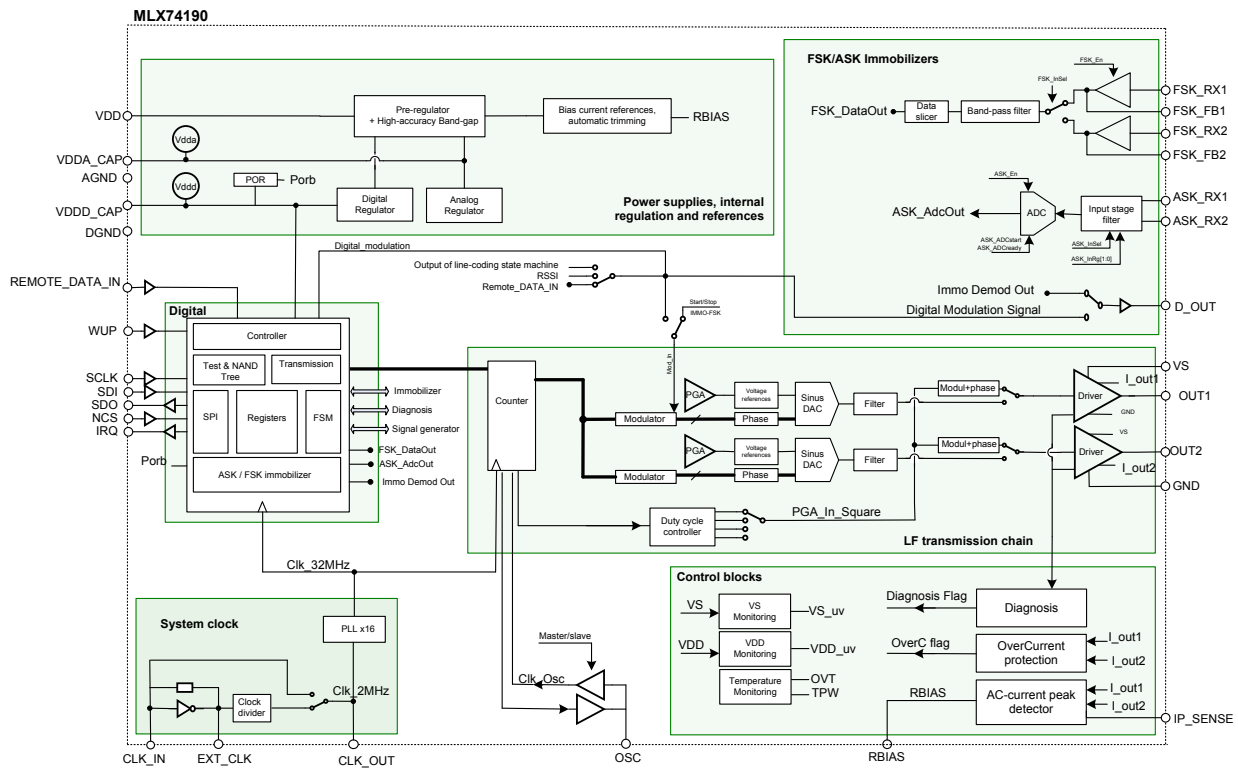
- Passive Start system for automotive
- "Dead man switch" for motorcycles, scooters and off-road vehicles
- TPMS Initiator
- LF door opener
- Active RFID initiator



Features

- Two high power independent drivers able to generate up to 2.5Apeak
- Programmable frequency from 109kHz up to 140kHz
- Programmable output voltage from 0.25 to 32Vpp
- Full and half bridge capabilities
- Built-in diagnosis and protection features (over-current, over-temp., antenna diagnosis)
- Built-in ASK and FSK immobilizers
- Easy-to-use SPI interface
- TQFP-48 package with exposed PAD

Block Diagram



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- Wireless ICs
- Hall Effect ICs And Sensors
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- Sensor Interface ICs
- Infrared Sensors



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