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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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# Smart Antenna Demonstrator

## Melexis Zone Detection Solution

The Melexis Smart Antenna demonstrator module is composed of the MLX73290-UHF transceiver, the MLX74190-LF initiator and the MLX81109 LIN-Slave, with the purpose of providing a complete zone detection solution for cars and off-road vehicles. The demonstrator module can be integrated with the vehicles using automotive standard LIN interface and passively identifies the presence of an authorized user through a high power LF wake-up mechanism and UHF identification exchange



## Applications

- Automotive & Motorcycle Passive Keyless Start systems
- Off-road vehicles "Dead Man's Switch"
- Passive door access systems (garage door, building ...)
- Intelligent pet feeder

## Ordering Information

The Smart antenna demonstrator is available for ordering by contacting your Melexis sales contact or directly by placing an order to [sales\\_europe@melexis.com](mailto:sales_europe@melexis.com) or [sales\\_usa@melexis.com](mailto:sales_usa@melexis.com) (Ordering references; DMB\_SmartAntenna & MLX LIN Master)



Bus ICs

BLDC Motor Control ICs

Pressure Sensors

Wireless ICs

Hall Effect ICs And Sensors

Optoelectronic Sensors

Sensor Interface ICs

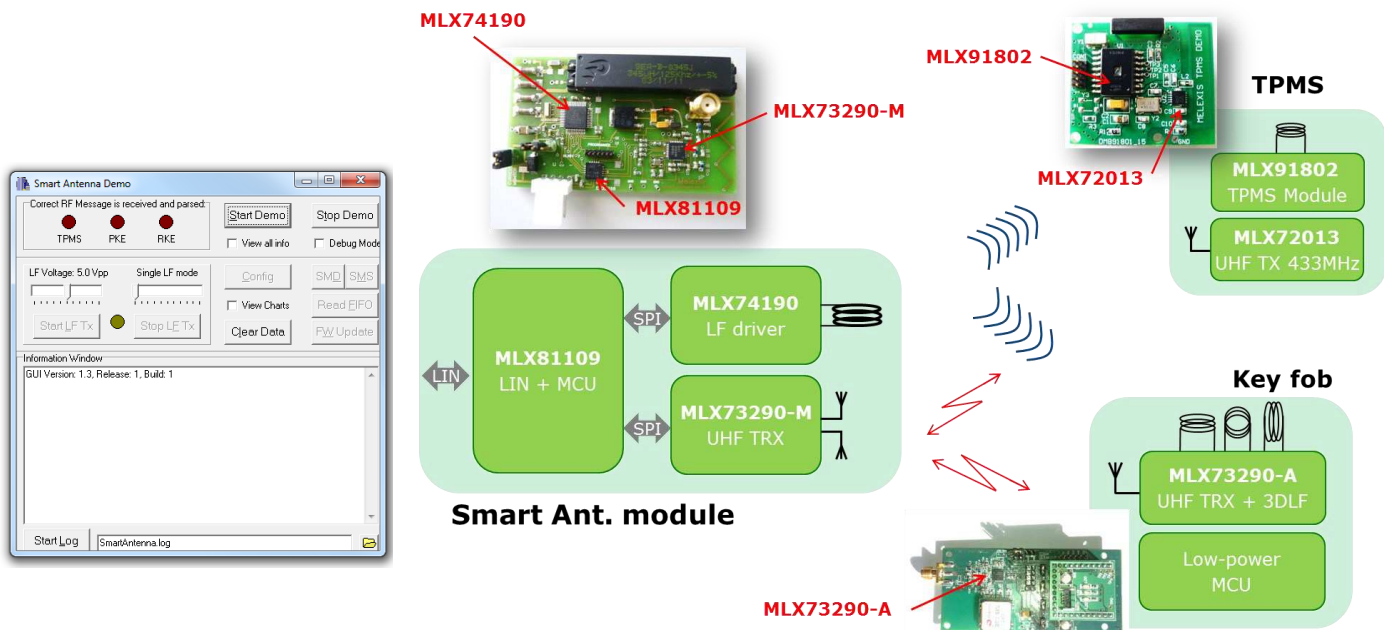
Infrared Sensors

## Features & Benefits

- Automatic reception of TPMS, RKE and PKE data information
- LF/UHF intelligent self-polling modes for ultra low power operations
- UHF Frequency optimized for 433.92MHz,  $\Delta f \pm 20\text{kHz}$  (GFSK), DR of 9.6kbps operation
- Very good UHF sensitivity < -115dBm for maximum RKE operation range
- UHF encrypted communication AES-128
- LF-125kHz High power capability up to 2.5Ap for maximum PKE operating range
- ASK & FSK immobilizer capabilities
- RSSI information for LF and RF interfaces
- 3DLF interface for ultra low-power wake-up <4 $\mu\text{A}$  (Key side)
- LIN-interface with embedded firmware example (control of MLX74190 and MLX73290-M ICs)
- Graphical User Interface (GUI) for easy and quick evaluation
- Rated for operation from -40 to 105°C

## Related Melexis Products

Part Code	Temperature Code	Package Code	Option Code
MLX74190	R (-40°C to 105°C)	PF (TQFP 7x7 48 leads)	AAA-000
MLX81109	K (-40°C to 125°C)	LQ (QFN20 5x5)	BAA-000
MLX73290-M	R (-40°C to 105°C)	LQ (QFN32 5x5)	BBM-000
MLX73290-A	S (-20°C to 85°C)	LQ (QFN32 5x5)	ABA-000
MLX91802	K (-40°C to 125°C)	XZ (SO16-wide)	DBU-000



For additional information email [info@melexis.com](mailto:info@melexis.com) or go to our website at: [www.melexis.com](http://www.melexis.com)

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