



## New Product Introduction

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July 2022

**MOTIX™ IMD700A / IMD701A**

**EconoDUAL™ 3 Wave power modules**

**EconoPIM™ and EconoPACK™ 2 and 3 IGBT modules with TRENCHSTOP™ IGBT7**

**TLD6098-1EP**

**BGSX33M5U16 - 3P3T MIPI 2.1 antenna cross switch**

**XENSIV™ - TLE4999C4 and C4-S0001 linear Hall sensors, fully ISO 26262 compliant**

**BGT60TR13C - XENSIV™ 60GHz radar sensor for advanced consumer sensing**

**AIROC™ CYW43439 and Module Partner Laird Connectivity**

**EVAL IMD700A FOC 3SH**

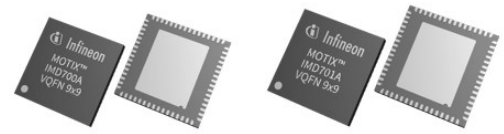
**EVAL-IKA15N65ET6 - Evaluation board for motor drive applications up to 1.2 kW**

**AURIX™ TC334 LITE kit**

**REF WINLIFT TLE9855**

# MOTIX™ IMD700A / IMD701A

MOTIX™ IMD700A and IMD701A are Infineon’s latest fully programmable motor controllers integrating XMC1404 microcontroller with MOTIX™ 6EDL7141 3 - phase gate driver IC in one package. This enables the development of next-generation battery-operated products using BLDC or PMSM motors. MOTIX™ IMD700A and IMD701A are ideal for applications such as professional cordless power tools, gardening products, e-bikes, and automated guided vehicles. With integrated precision power supply and current shunt amplifiers, many of the peripheral circuitry is no longer necessary allowing a reduction in PCB space, increased power density, and improved system packaging possibilities.



## Features

- > XMC1404 with MATH co-processor
- > Integrated power supplies
- > Adjustable slew rate
- > Programmable gate drive parameters
- > 3x current shunt amplifier
- > Complete dedicated motor control protection suite

## Benefits

- > Reduced external component count and PCB area
- > Optimized efficiency and EMI
- > Maximum flexibility to use different inverter MOSFET's
- > Highly accurate integrated current sense saves external components
- > Higher dynamic range to increase signal resolution
- > Improved reliability and fault detection

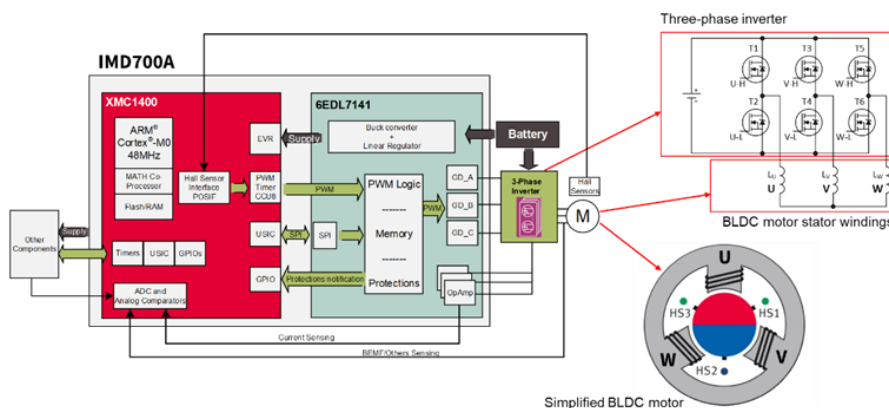
## Competitive advantage

- > Motor drive specific XMC with dedicated high-performance 3-phase motor control gate driver IC for battery-operated products
- > Fully programmable to provide the best system performance and efficiency

## Target applications

- > Cordless power tools
- > Automated guided robots
- > Cordless gardening tools
- > Drones

## Block diagram



## Product collaterals / Online support

- [Product family page](#)
- [Product page IMD700A](#)
- [Product page IMD701A](#)
- [Product brief](#)
- [Evaluation board page](#)

## Product overview incl. data sheet link

OPN	SP Number	Package
<a href="#">IMD700AQ064X128AAXUMA1</a>	SP005354876	PG-VQFN-64
<a href="#">IMD701AQ064X128AAXUMA1</a>	SP005576993	PG-VQFN-64

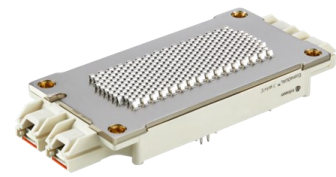
## EconoDUAL™ 3 Wave power modules

CO<sub>2</sub> reduction targets make the electrification of large vehicles inevitable, but the repetitive start-stop cycles and the long operation hours put a high demand on power module lifetime.

The Wave power modules come in the standard EconoDUAL™ 3 housing, but feature additional ribbon bonds on the backside for an advanced cooling concept with direct liquid cooling. The ribbon bond solution reduces overall temperatures and ripple in e-trucks, e-buses, drives or wind applications.

The temperature can be reduced by around 25 Kelvin leading to a lifetime extension of up to factor 6. Or at the same lifetime level, the current can be increased by up to 30 %.

In addition, no thermal grease material is needed leading to a simplified inverter production.



### Features

- > EconoDUAL™ 3 housing
- > 1200 V, 600 A & 900 A
- > TRENCHSTOP™ IGBT7 chip generation (FF900 only)
- > Ribbon-bond structure on the baseplate for direct liquid-cooled heat sink
- > PressFIT control pins and screw power terminals
- > Compact and robust design with molded terminals

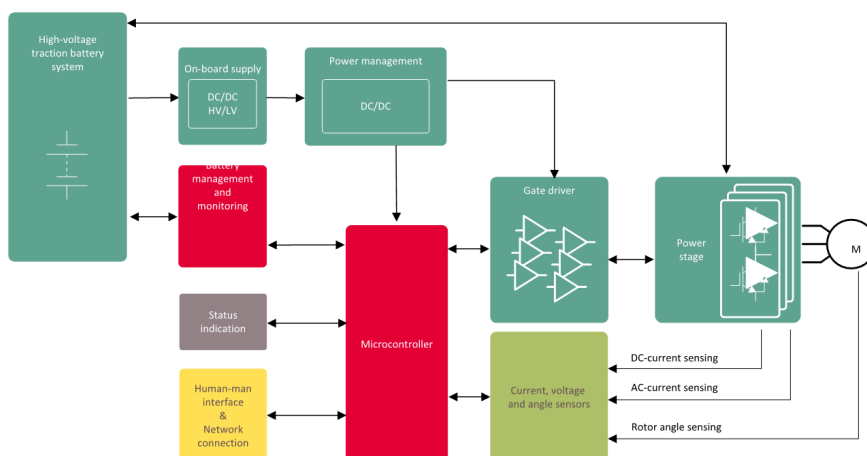
### Benefits

- > 25 K lower temperature
- > Up to 6 times longer lifetime due to better cooling
- > Or improved output current by up to 30 % at same lifetime
- > Simplified inverter production induced by no thermal grease application

### Target applications

- > eCAV
- > Drives
- > Wind

### Block diagram



### Product collaterals / Online support

[Product page FF600R12ME4W\\_B73](#)

[Product page FF900R12ME7W\\_B11](#)

[Product family page EconoDUAL™ 3](#)

### Product overview incl. data sheet link

OPN	SP Number	Package
<a href="#">FF600R12ME4WB73BPSA1</a>	SP005589477	AG-ECONOD-411
<a href="#">FF900R12ME7WB11BPSA1</a>	SP005589481	AG-ECONOD-711

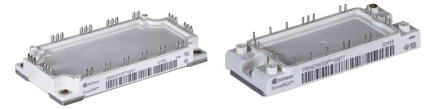
## EconoPIM™ and EconoPACK™ 2 and 3 IGBT modules with TRENCHSTOP™ IGBT7 portfolio extension

The portfolio of EconoPIM™ and EconoPACK™ 2 and 3 IGBT modules with TRENCHSTOP™ IGBT7 chip generation has now been extended.

The EconoPACK™ modules in sixpack configuration now feature 50, 75, 100 and 200 A versions. The EconoPIM™ family has additional options for customers to choose from including pre-applied thermal interface material TIM, solder pin or PressFIT options.

The modules can reach up to 175° C  $T_{vjop}$  under overload conditions, making them a perfect fit for industrial drives applications.

Compared to IGBT4, the IGBT7 has a higher power density, an increased switching frequency, the cooling effort can be reduced. All in all, there is the same or better lifetime while keeping the operating conditions unchanged.



### Features

- > 1200 V, 50 – 200 A
- > Econo 2 and 3 housing
- > PIM and sixpack topology
- > Latest TRENCHSTOP™ IGBT7 chip generation
- > Additional options incl. pre-applied TIM, solder pin or PressFIT version

### Target applications

- > Industrial drives

### Competitive advantage

- > Broadest portfolio giving designers a maximum level of flexibility

### Benefits

- >  $V_{CEsat}$  is reduced by 20 % compared to IGBT4 while keeping the turn-off losses at the same level
- > Optimized for drives applications  $T_{vjop}$  under overload up to 175° C
- > High power density
- > Broadest portfolio meets different customer needs

### Product collaterals / Online support

[Product page EconoPIM™](#)

[Product page EconoPACK™](#)

[Product page IGBT7](#)

### Product overview incl. data sheet link

OPN	SP Number	Package
<a href="#">FP50R12N2T7PBPSA1</a>	SP005407056	AG-ECONO2B-711
<a href="#">FP50R12N2T7PB11BPSA1</a>	SP005595806	AG-ECONO2B-711
<a href="#">FP75R12N2T7PB11BPSA1</a>	SP005595812	AG-ECONO2B-711
<a href="#">FP75R12N3T7B11BPSA1</a>	SP005632397	AG-ECONO3B-711
<a href="#">FP75R12N3T7BPSA1</a>	SP005632393	AG-ECONO3B-711
<a href="#">FP100R12N2T7B11BPSA1</a>	SP005597715	AG-ECONO2B-711
<a href="#">FP100R12N3T7B11BPSA1</a>	SP005402466	AG-ECONO3B-711
<a href="#">FP100R12N3T7BPSA1</a>	SP004145198	AG-ECONO3B-711
<a href="#">FP150R12N3T7B11BPSA1</a>	SP005404168	AG-ECONO3B-711
<a href="#">FP150R12N3T7PB11BPSA1</a>	SP005596103	AG-ECONO3B-711
<a href="#">FP200R12N3T7B11BPSA1</a>	SP005612514	AG-ECONO3B-711
<a href="#">FS50R12N2T7B15BPSA2</a>	SP005612508	AG-ECONO2B-711
<a href="#">FS75R12N2T7B15BPSA2</a>	SP005612510	AG-ECONO2B-711
<a href="#">FS100R12N2T7B15BPSA1</a>	SP005551553	AG-ECONO2B-711
<a href="#">FS150R12N2T7B15BPSA1</a>	SP005551571	AG-ECONO2B-711
<a href="#">FS150R12N2T7B54BPSA1</a>	SP005546346	AG-ECONO2B-711
<a href="#">FS150R12N3T7BPSA1</a>	SP004145224	AG-ECONO3B-711
<a href="#">FS200R12N3T7BPSA1</a>	SP005337556	AG-ECONO3-4

# TLD6098-1EP



LITIX™ Power TLD6098-1EP is a single channel configurable DC-DC boost controller with built-in diagnosis and protection features for automotive exterior and interior lighting.

## Features

- > Peak current mode controller
- > Fixed current or fixed voltage configuration in Boost, Buck, Buck-Boost, SEPIC and Flyback topology
- > Drives low-side external n-channel switching MOSFET from internal 5 V voltage regulator
- > Flexible switching frequency range from 100 kHz to 500 kHz with spread spectrum modulator
- > Synchronization with external clock source from 100 kHz to 500 kHz and 2.2 MHz
- > Wide input voltage range from 4.5 V to 60 V
- > Analog dimming and PWM dimming feature (embedded or external) to adjust average LED current
- > Integrated PMOS gate drivers for PWM dimming and output disconnection
- > Automotive qualified

## Benefits

- > Reduced EMI emissions
- > Reliable protection with high - side load disconnection using a PMOS
- > 2.2 MHz option for small size DC-DC

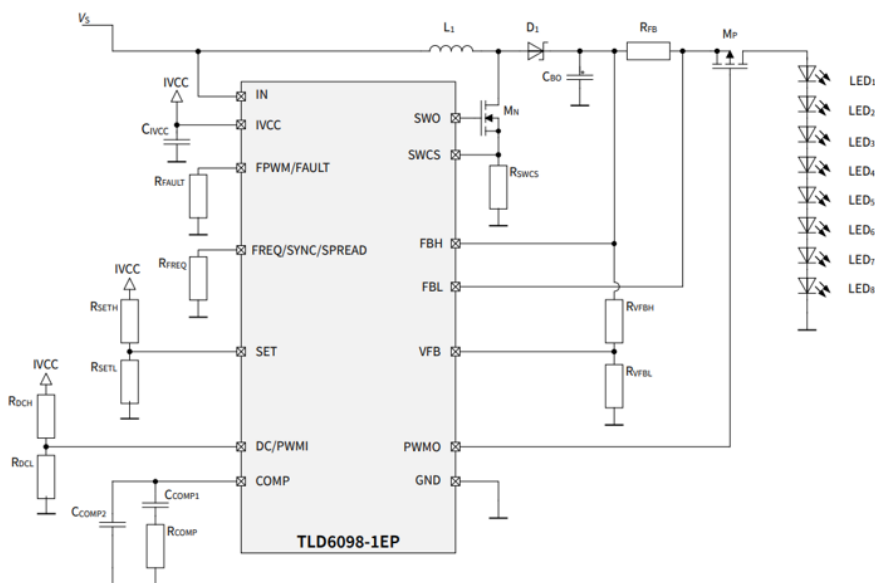
## Target applications

- > Automotive exterior and interior lighting
- > General illumination
- > General-purpose constant output current / voltage applications

## Competitive advantage

- > Low EMI emissions
- > Reliable protection with high-side load disconnection using a PMOS

## Block diagram



Product collaterals / Online support

[Product page](#)

## Product overview incl. data sheet link

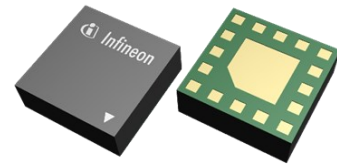
OPN	SP Number	Package
<a href="#">TLD60981EPXUMA2</a>	SP005568815	PG-TSDSO-14

# BGSX33M5U16 - 3P3T MIPI 2.1 antenna cross switch

## 3P3T MIPI 2.1 antenna cross switch

The BGSX33M5U16 RF CMOS switch is specifically designed for LTE and 5G antenna applications. This 3P3T cross-switch offers low insertion loss and low harmonic generation.

The switch is controlled via a MIPI RFFE control interface. The on-chip controller allows power-supply voltages from 1.65 to 1.95 V. Unlike GaAs technology, external DC blocking capacitors at the RF ports are only required if DC voltage is applied externally. The device has a very small size of only 2.0 mm x 2.0 mm and a thickness of 0.6 mm.



### Features

- > High linearity up to 38 dBm peak power
- > Fast switching speed (2  $\mu$ s max.) for 5G SRS applications
- > Very low insertion loss and high port to port isolation up to 7.125 GHz
- > MIPI RFFE 2.1 control interface
- > Software and hardware programmable USID
- > Ultra low profile lead - less plastic package (MSL-1, 260° C per IPC / JEDEC J-STD-20)
- > RoHS and halogen-free package

### Competitive advantage

- > Fastest switching speed 3P3T (2  $\mu$ s max.)
- > Lowest insertion loss 3P3T in the market, 0.88 dB max. at 5G NR band n79 (4.4 - 5.0 GHz)

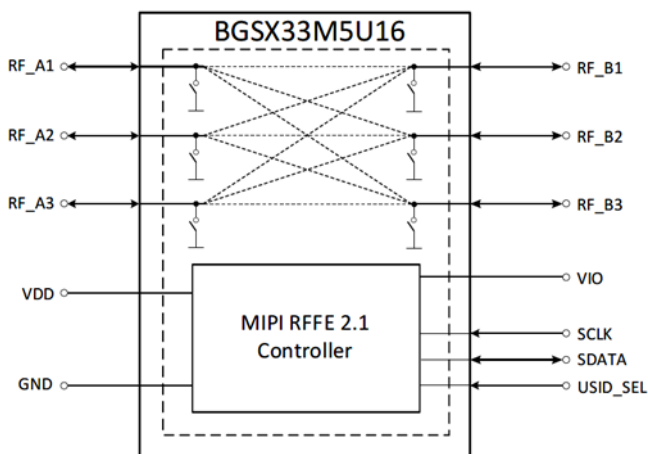
### Benefits

- > Optimizing RF performance through best antenna selection and swapping of LTE / 5G triple antenna applications
- > Enabling 5G new radio (NR) coverage with very low system losses
- > Targeting 4 x 4 MIMO and 3 antenna 5G SRS application
- > Enhancing device's battery lifetime by reducing SAR unwanted effects

### Target applications

- > LTE / 5G smartphones
- > 5G notebooks / laptops
- > 5G customer - premises - equipment (CPE), 5G routers

### Block diagram



Product collaterals / Online support

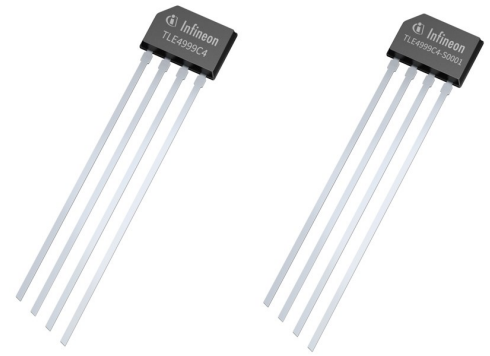
[Product page](#)

### Product overview incl. data sheet link

OPN	SP Number	Package
<a href="#">BGSX33M5U16E6327XTSA1</a>	SP005425077	PG-ULGA-16

## XENSIV™ - TLE4999C4 and C4-S0001 linear Hall sensors, fully ISO 26262 compliant

The TLE4999C4 and C4-S0001 are dual channel linear Hall sensors with a bus-capable digital Short-PWM-Code (SPC) interface. Both channels are integrated on one die in the chip. The highly accurate measurement channels (main and sub) can be used for a plausibility check on system level. This enables a high diagnostic coverage. The sensor is developed in compliance to ISO 26262 (first edition 2011), supporting safety requirements on system level rated up to ASIL D (C4) and ASIL C (S0001). Highest accuracy over a wide temperature range and lifetime is achieved by an integrated digital temperature- and stress-compensation.



### Features

- > Two highly accurate redundant Hall measurement channels (main and sub) integrated on one chip
- > Developed compliant to ISO 26262 (first edition 2011) Safety Element out of Context for safety requirements rated up to ASIL D
- > High diagnostic coverage by plausibility checking of main and sub signal on system level
- > Fast digital SPC interface with min. 0.5  $\mu$ s unit time for transmission of main and sub signals in less than 500  $\mu$ s
- > Bus-capability for up to 4 sensor ICs on one data line
- > Selectable 12 / 14 / 16 bit output signals, protected by CRC and rolling counter
- > Thin 4 pin leaded single sensor package
- > Operating automotive temperature range -40° C to 150° C
- > Digital temperature and stress compensation
- > Reverse-polarity and over voltage protection for VDD, GND and OUT pins
- > Main and sub channel programmable independently in EEPROM
- > Multipoint calibration up to 9 points
- > Frameholder mechanism
- > Single-wire SICI programming interface on output pin
- > 2 x 16 bit user-configurable ID in EEPROM

### Benefits

- > High diagnostic coverage, ISO 26262-compliance and dual sensor cell integration enable development of fail operational systems
- > Multi-point calibration for better fit into various magnetic circuit designs
- > Easy system integration due to programmability of several sensor parameters

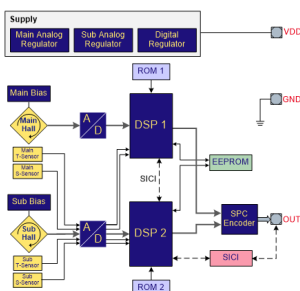
### Competitive advantage

- > Infineon provides excellent functional safety design support during development enabling for ASIL D systems with two sensor channels in one device
- > SPC protocol enables common bus usage with angle sensors, with common timestamp for up to 4 sensors.
- > Tolerance specifications over temperature and life time enable for higher tolerances of mechanical components and use of less expensive magnet power down mode (7 nA)

### Target applications

- > Robust replacement of potentiometers: No mechanical abrasion, resistant to humidity, temperature, pollution, and vibration.
- > Linear and angular position sensing in automotive and industrial applications with highest accuracy requirements.
- > Suited for safety applications such as pedal position, throttle position, and steering torque sensing.

### Block diagram



### Product overview incl. data sheet link

OPN	SP Number	Package
<a href="#">TLE4999C4HALA1</a>	SP005425077	PG-SSO-4
<a href="#">TLE4999C4S0001HALA1</a>	SP005727375	PG-SSO-4

### Product collaterals / Online support

[Product page TLE4999C4](#)

[Product page TLE4999C4-S0001](#)

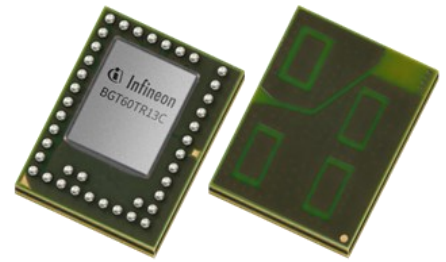


## BGT60TR13C - XENSIV™ 60 GHz radar sensor for advanced consumer sensing

The BGT60TR13C MMIC is a 60 GHz radar sensor with integrated antennas and comes with one transmitting and three receiving antennas. Thanks to the L-shaped antenna array, horizontal and as well as vertical angular measurement can be ensured. Moreover, the Antennas in Package (AIP) concept eliminates the antenna design complexity at the user end and the PCB can be designed with standard FR4 materials.

With its small form factor and low power consumption, BGT60TR13C MMIC brings innovative, intuitive sensing capabilities to many applications. Based on the developed algorithm the MMIC can serve established as well as new applications and use cases without intruding on privacy.

BGT60TR13C has been demonstrated to be a powerful sensor for presence detection/segmentation, touchless interaction and vital sensing.



### Features

- > Integrated Finite - State - Machine (FSM)
- > Fast chirp speed: 800 MHz /  $\mu$ s
- > High Signal - To - Noise Ratio (SNR)
- > High Bandwidth >5 GHz
- > FMCW operation
- > Integrated L-shaped antennas + small package ( 6.5 x 5.0 x 0.9 mm<sup>3</sup> )
- > Able to track vital signs in consumer electronics, healthcare as well as industrial applications

### Benefits

- > Enables human presence detection, tracking, and segmentation while providing extremely high accuracy in detecting micro & macro motions
- > Allows semi - autonomous operation
- > Highly configurable modulation and power modes
- > High velocity resolution
- > High sensitivity allows submillimeter level motion detection

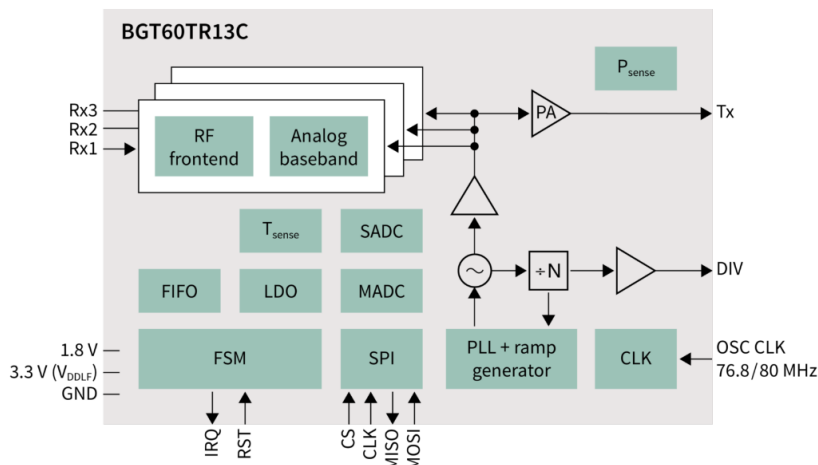
### Demo board

- > This demo features Infineon's advanced 60 GHz radar sensor – the BGT60TR13C. The BGT60TR13C MMIC comes with integrated antennas and is equipped with one transmitting and three receiving antennas.

### Target applications

- > Smart TV
- > Smart speaker
- > Notebook / PC
- > Vital sensing monitoring systems

### Block diagram



### Product collaterals / Online support

[Product page](#)

[Product brief](#)

[Board page](#)

### Product overview incl. user manual link

OPN	SP Number	Package
<a href="#">BGT60TR13CE6327XUMA1</a>	SP002262606	PG-VF2BGA-40
<a href="#">DEMOBGT60TR13CTOBO1</a>	SP005728718	



# AIROC™ CYW43439 and Module Partner Laird Connectivity



AIROC™ CYW43439 and Laird Connectivity's Sterling LWB+ Modules are the perfect pairing ... Reliable, Secure and Power Efficient Designs for the Connected Edge. The CYW43439 has a 1x1 single-band 2.4 GHz Wi-Fi 4 and Bluetooth® 5.2. It includes updated Bluetooth® capabilities, including enhanced security with WPA3, plus Soft AP and shared SDIO host interface for Wi-Fi + Bluetooth®.

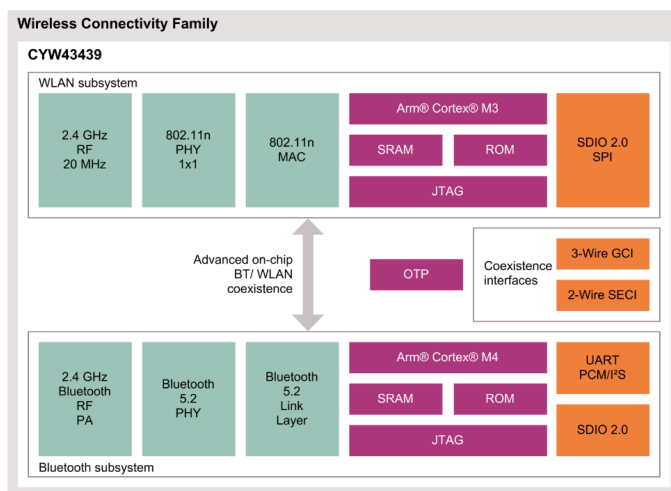
## Features

- > Wi-Fi features:
  - > Wi-Fi 4 (802.11 n)
  - > Single - band (2.4 GHz)
  - > 1x1 SISO
  - > 20 MHz channels, up to 96 Mbps PHY data rate
  - > Integrated internal PA, LNA, and T/R switch supports a single antenna shared between Wi-Fi and Bluetooth
- > Bluetooth features:
  - > Class 1 (100 m) and Class 2 (10 m) operation
  - > Bluetooth 5.2, supports BDR (1 Mbps), EDR (2/3 Mbps), and Bluetooth LE

## Target applications

- > Smart home: smart appliances, smart thermostat, smart doorbells, IP cameras, service robots
- > Consumer audio: smart speakers
- > Digital signage, Mobile Asset Scanners
- > Factory Automation: industrial robotics, asset tracking
- > Power & energy: smart meters, data concentrators
- > Building control: surveillance equipment, smart commercial HVAC, occupancy management
- > Healthcare: blood pressure monitors, tele - health gateways, connected patient room equipment

## Block diagram



Product overview incl. data sheet [link](#)

<b>OPN</b>	<b>Package</b>
<a href="#">CYW43439KUBGT</a>	WLCSP

## Benefits

- > Cost - optimization without sacrificing Wi-Fi RF performance or security
- > Built on market proven wireless IP – maximum interoperability
- > Efficient power consumption for Wi-Fi 4 enabled devices
- > Supports concurrent Wi-Fi and Bluetooth connectivity use cases
- > Reduction in development time with Wi-Fi software enablement for both RTOS (i.e. ModusToolbox™) and Linux/Android designs with multiple hosts supported
- > Rapid time - to - market with partner modules and development kits integrating AIROC™ CYW43439 with full global certifications, reference platforms, and more
- > Wi-Fi support in Infineon Developer Community with direct access to online applications support engineers

## Competitive advantage

- > Linux (v4.1 to v5.15), Android (9 &10) and RTOS (MODUS & STM32 Cube) broader coverage
- > Power optimized solution and smaller footprint design for space constrained applications

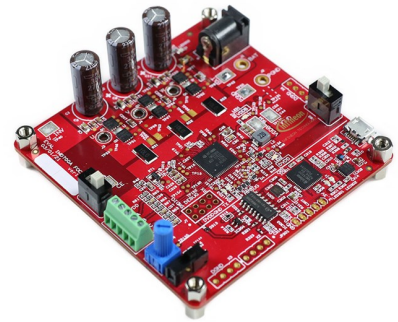
## Product collaterals / Online support

[Product page](#)

[Product information Laird Connectivity module](#)

# EVAL\_IMD700A\_FOC\_3SH

EVAL\_IMD700A\_FOC\_3SH with configurable gate drive, on-board power supplies and protection, is capable of driving up to 300 W motor utilizing sensor-less FOC control. Using MOTIX™ IMD701A, our latest fully programmable motor controller integrating XMC1404 microcontroller with MOTIX™ 6EDL7141 3-phase gate driver IC in one package to enable the development of next generation battery operated products using BLDC or PMSM motors.



## Features

- > Fully integrated BLDC motor drive solution based on the MOTIX™ IMD701A
- > Configurable gate drive, on-board power supplies and protection
- > Integration of XMC1404 and MOTIX™ 6EDL7141 in one package
- > Can operate independently or with Infineon motor control GUI

## Benefits

- > High efficiency
- > Small size
- > Low component count
- > Based on MOTIX™ IMD701A integrated XMC1404 microcontroller and smart MOTIX™ 6EDL7141 3-phase gate driver for BLDC motor drives with 3 x 3 sized OptiMOS™ 6 40 V / 1.5 mOhm power devices
- > Operates up to 300 W with no heatsink required

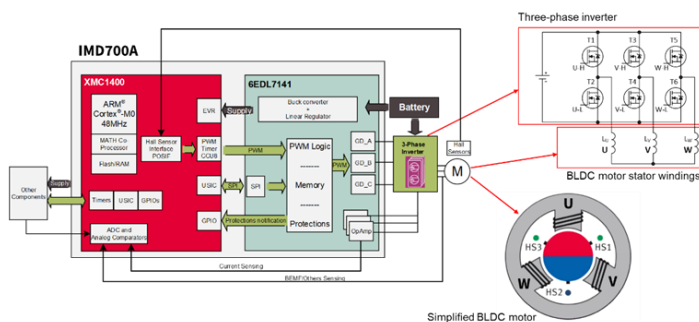
## Competitive advantage

- > Very low power consumption
- > Excellent thermal management removes need of expensive heatsink
- > Most compact solution on the market

## Target applications

- > Motor control & drives
- > Power tools
- > Robotics - production
- > Small home appliances
- > Three phase - 2 Level
- > Three phase control

## Block diagram



Product collaterals / Online support

[Board page](#)

Product overview incl. user manual link

OPN	SP Number
<a href="#">EVALIMD700AFOC3SHTO01</a>	SP005573307

## EVAL-IKA15N65ET6 - Evaluation board for motor drive applications up to 1.2 kW

The evaluation board EVAL-IKA15N65ET6 is intended to control three-phase motors, plus power factor correction (PFC). The board is equipped with all assembly groups for sensor less field-oriented control (FOC). It includes an EMI filter and soft power-up circuit, an 8-pin iMOTION™ interface connector, the motor controller, a PFC gate drive circuit, an auxiliary power supply, discrete modules, and a three-phase output for connecting the motor.



### Features

- > Power factor correction (PFC) control stage with Rapid 1 IDW30E65D1 and TRENCHSTOP™ 5 IGBT IKWH30N65WR6 in a wide creepage and clearance TO-247 package
- > 3-phase, 2-level inverter with TRENCHSTOP™ IGBT6 IKA15N65ET6 in TO-220FP, 15 A, 650 V
- > Sensor less or hall sensor operation using the TLI4971
- > IMD112T-6F040 controller for PFC and inverter operation

### Target applications

- > Corded power tools
- > Home appliances
- > Residential aircon - motor-, system control and monitoring
- > Washer and dryer motor-control - quieter systems

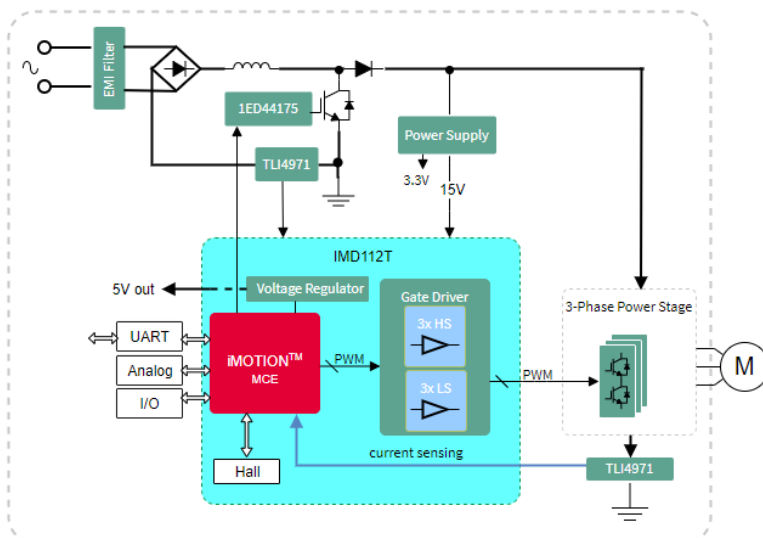
### Benefits

- > Complete solution for PMSM or brushless DC machines, used e.g. for pumps, fans, washing machines, general purposes drives and power tools up to 1.2 kW
- > All devices (PFC & inverter) in through hole standard packages on a common heatsink
- > Lower BOM cost due to a single iMOTION™ controller for PFC and inverter functionally together
- > Improved efficiency of the inverter via hall sensor
- > Evaluation board can be used during the design-in process, for evaluating and measuring characteristic curves, and for checking datasheet specifications.

### Competitive advantage

- > Comprehensive solution in through hole devices enables easy plug and play for evaluation purposes

### Block diagram



Product collaterals / Online support

[Board page](#)

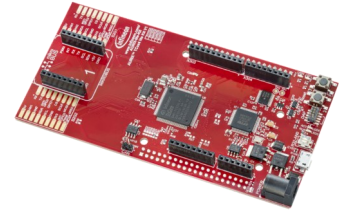
Product overview incl. user manual link

OPN	SP Number
<a href="#">EVALIKA15N65ET6TOBO1</a>	SP005749161

# AURIX™ TC334\_LITE kit

AURIX™ TC334 lite kit is equipped with a 32-Bit Single-Chip AURIX™ TriCore™ based-Microcontroller AURIX™ TC334.

It can be used with a range of development tools including AURIX™ Development Studio, Infineon's free of charge Eclipse-based IDE or the Eclipse-based "FreeEntryToolchain" from Hightec / PLS / Infineon.



## Features

- > Most AURIX™ pins available on expansion connectors (X1, X2)
- > Two Infineon Shield2Go connectors
- > Arduino compatible connectors for 3.3 V
- > mikroBUS™ connector
- > Micro-USB connector
- > DAP Debug connector
- > CAN connector
- > RJ45 connecto
- > CAN transceiver TLE9251VSJ from Infineon
- > 1 user push-button, 3 user LEDs
- > Reset push-button
- > Potentiometer (10 kOhm) for variable analog input

## Target applications

- > Automotive
- > Industrial

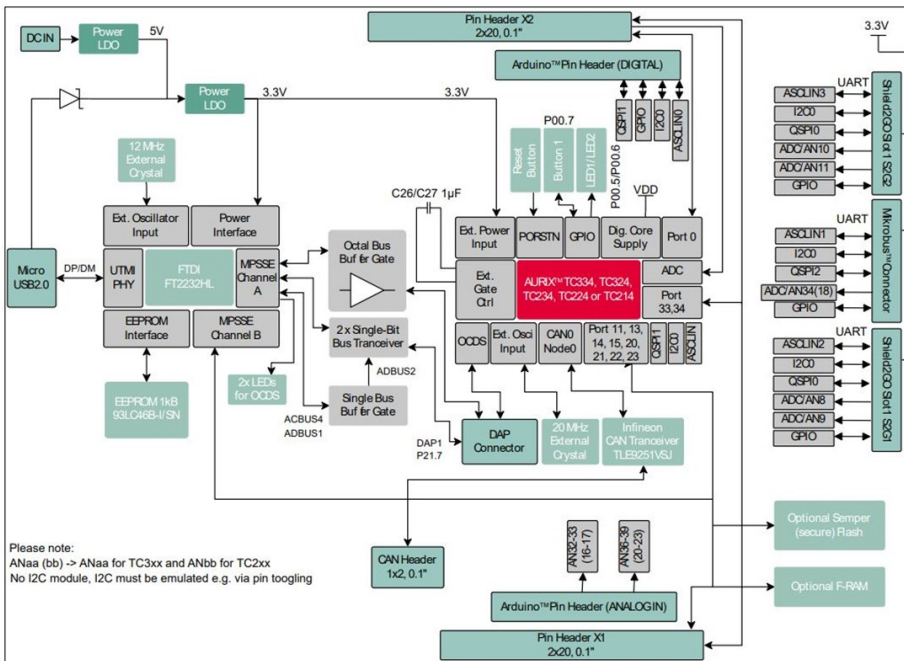
## Benefits

- > Can be used with a range of development tools including Infineon's free of charge Eclipse based IDE AURIX™ Development Studio or the Eclipse based "FreeEntryToolchain" from HighTec / PLS / Infineon
- > Is a comprehensive environment, including C-Compiler and Multi-core Debugger, Infineon's low - level driver (iLLD), with no time and code-size limitations that enables editing, compiling and debugging application code
- > The FreeEntryToolchain is a full C/C++ development environment which has a source-level UDE debugger from PLS included and is also based on Infineon low-level driver (iLLD)

## Product collaterals / Online support

[Board page](#)

## Block diagram



## Product overview incl. user manual link

OPN	SP Number
<a href="#">KITA2GTC334LITETOBO1</a>	SP005626540

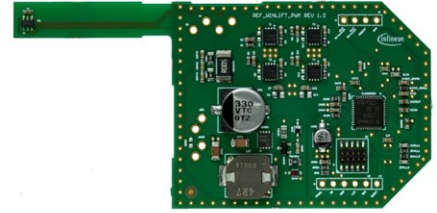
## REF\_WINLIFT\_TLE9855

The REF\_WINLIFT\_TLE9855 is a reference design developed for 2-phase automotive window lift systems.

**TLE9855QX:** This device is a part of the Embedded Power IC family and it is a single chip H-Bridge motor driver, System-on-Chip (SoC) solution. It integrates an industry-standard Arm® Cortex®-M0 core along with LIN transceiver, bridge driver and power supply.

**IPZ40N04S5-3R1:** This component is an OptiMOS™ 5 40 V in S308 Package and it combines leading power MOSFET technology with a 3.3 x 3.3 mm leadless power package for very compact and robust automotive system solutions. It is based on Infineon's latest silicon automotive PowerMOS technology, optimized to meet and exceed the energy efficiency and power density requirements of automotive BLDC and H-bridge applications. In combination with Infineon's robust S308 leadless package technology, it enables very small and efficient system designs with minimal RDS down to 2.8 mΩ.

**TLE4966G:** This is device is an integrated circuit double Hall-effect sensor designed specifically for highly accurate applications in the automotive sector. Precise magnetic switching points and high-temperature stability are achieved by active compensation circuits and chopper techniques on-chip.



### Features

- > Reference for EMC and board size
- > Optimized BOM and PCB size
- > Power capability up to 200W
- > SWD port for debug connection
- > LIN, Panel and monitoring connector
- > High - temperature FR4 PCB, 2 - layer copper
- > Small 90 mm x 55 mm PCB size

### Benefits

- > Reduced time to market
- > Minimal BOM and reduced PCB size
- > State of the art components
- > Scalability of the device

### Target applications

- > Car windows

### Product collaterals / Online support

[Board page](#)

### Product overview incl. user manual link

OPN	SP Number
<a href="#">REFWINLIFTTLE9855TOBO1</a>	SP005679693