



# Infineon's solutions for multicopters

Introducing a new cost effective system solution to ensure excellent user experience  
Fly longer, safer & with more value-adding functionalities

[www.infineon.com/multicopter](http://www.infineon.com/multicopter)

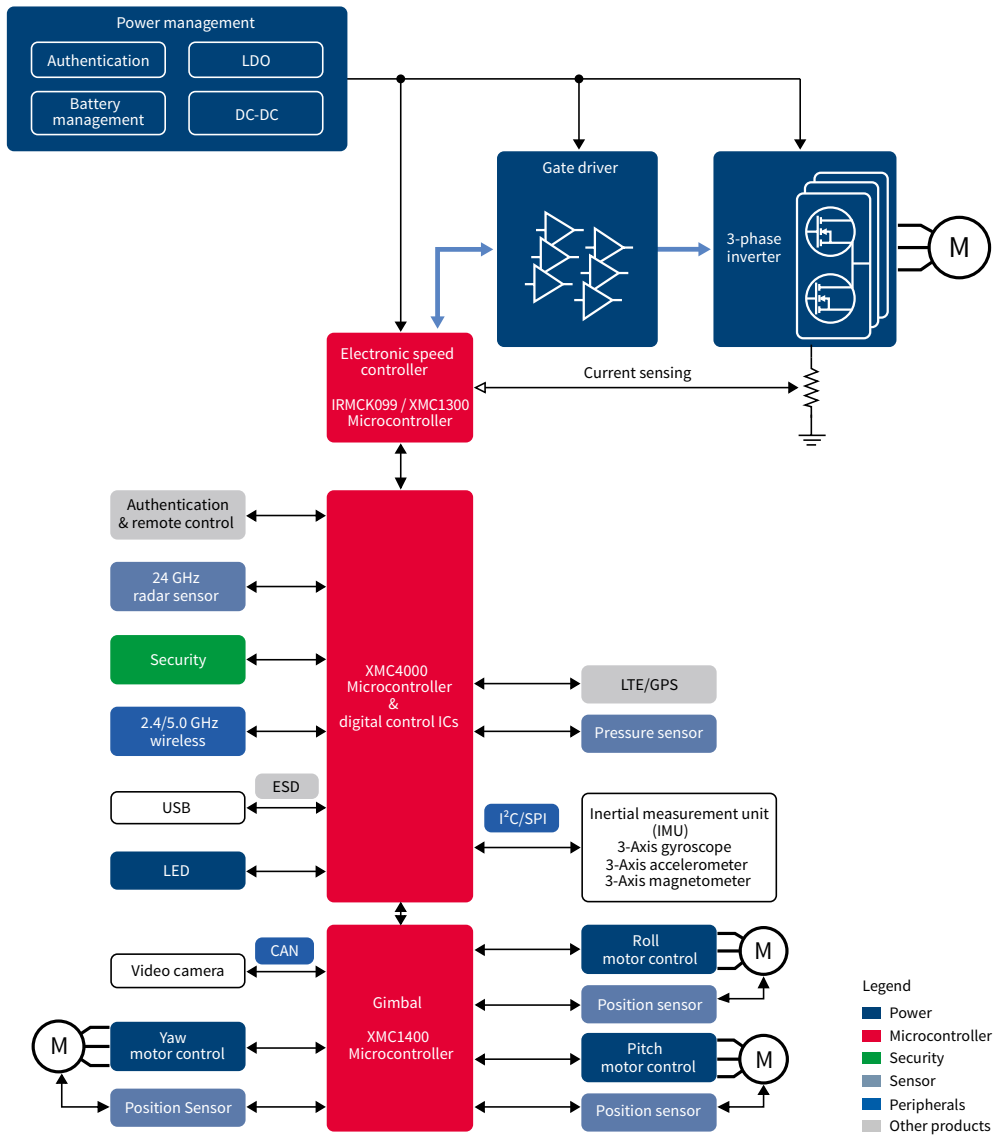


# Industry-leading full system multicopter solutions

Commercial multicopters have come a long way in recent years, evolving from toys to coastal and event mapping sophisticated programmable aircraft. This provides challenges and opportunities for multicopter manufacturers.

Infinion produces cost effective system solutions for this rapidly growing market thereby ensuring an excellent flight experience and simultaneously meeting the requirements of the end user such as lighter weight, longer flying time, safety, reliability, etc.

Benefits	Offer
<b>Development effort and cost reduction</b>	<ul style="list-style-type: none"> <li>&gt; With no or little experience in motor control customers can implement the iMOTION™ motor control IC and take flight</li> <li>&gt; Project development effort can be reduced by 30 percent by using reference designs and the DAVE™ platform for microcontroller programming</li> </ul>
<b>Security and authentication</b>	<ul style="list-style-type: none"> <li>&gt; Enables authentication of components connected to the system. Safety is secured and product liability protected</li> <li>&gt; Brand protection and a secured strong identity are provided by state-of-the-art security products which are easy to integrate</li> </ul>
<b>Accuracy and easy control</b>	<ul style="list-style-type: none"> <li>&gt; Multifunctional sensors guarantee an easy, stable, smooth, and accurate control of the multicopter</li> <li>&gt; Closed loop control of gimbal motor and sensors enhance the stability of the camera and data transmission when recording videos</li> </ul>
<b>Lighter</b>	<ul style="list-style-type: none"> <li>&gt; The highly efficient components and an effective flight control make the multicopter lighter resulting in longer flight time</li> </ul>
<b>Collision avoidance</b>	<ul style="list-style-type: none"> <li>&gt; The 24GHz radar can be used to measure the presence of objects, range, and speed/velocity! And it determines proximity as well as an object's position</li> </ul>
<b>Broad portfolio</b>	<ul style="list-style-type: none"> <li>&gt; Infineon provides a comprehensive portfolio of semiconductor components for multicopters</li> </ul>

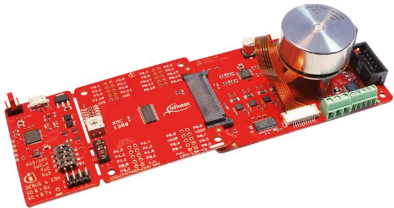
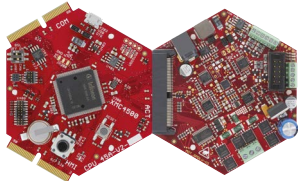
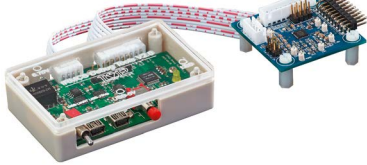
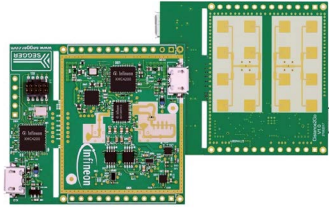


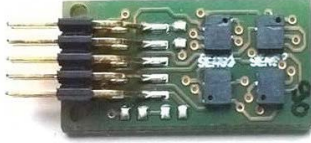



# Reliable and durable solutions for multicopters

Flight control					ESC		
Microcontroller	Sensor	DC-DC module	LDO	Low noise amplifier (LNA)	Microcontroller	Sensor	Intelligent power module
<ul style="list-style-type: none"> <li>&gt; XMC4000 family</li> <li>&gt; XMC1000 family</li> <li>&gt; AURIX™</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Pressure sensor: DPS310</li> <li>&gt; 24 GHz radar sensor: BGT24MR2, BGT24MTR11/BGT24MTR12/BGT24LTR11</li> <li>&gt; Current sensor: TLI4970</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IFX90121ELV50</li> <li>&gt; IFX91041EJV33</li> <li>&gt; IFX91041EJV50</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IFX1117ME</li> <li>&gt; IFX54441EJV</li> <li>&gt; IFX1763XEJV33</li> </ul>	<ul style="list-style-type: none"> <li>&gt; LTE: BGA7H, BGA7M, BGA7L</li> <li>&gt; GPS: BGA524N6, BGA824N6</li> <li>&gt; Wi-Fi: BFP842ESD, BFR840L3RHESD, BFR843L3, etc.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; XMC1300 family</li> <li>&gt; iMOTION™</li> <li>&gt; IRMCK099</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Hall sensor: TLI4961, TLV4961</li> <li>&gt; Angle sensor: TLI5012B, TLE5009</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IRSM005 – 800MH</li> <li>&gt; IRSM836 – 084MA</li> </ul>
Security	Accessory authentication	Joystick	Interface protection diodes	LED driver	MOSFET gate driver	Dual n-channel power MOSFET	Low voltage MOSFETs
<ul style="list-style-type: none"> <li>&gt; OPTIGA™ Trust E SLS32AIA</li> <li>&gt; OPTIGA™ Trust P SLJ52ACA</li> <li>&gt; OPTIGA™ TPM SLB96XX</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OPTIGA™ Trust SLS10ERE</li> <li>&gt; OPTIGA™ Trust B SLE95250</li> </ul>	<ul style="list-style-type: none"> <li>&gt; 3D magnetic sensor: TLV493D</li> </ul>	<ul style="list-style-type: none"> <li>&gt; ESD102 series</li> </ul>	<ul style="list-style-type: none"> <li>&gt; BCR450</li> <li>&gt; BCR321U</li> <li>&gt; BCR421U</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IRS2301S</li> <li>&gt; 6EDL04N02P</li> <li>&gt; IRS23365</li> <li>&gt; PX3517</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IR3742, etc.</li> <li>&gt; BSC0925ND, etc.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OptiMOS™ 5 series</li> <li>&gt; StrongIRFET™ series</li> </ul>
Charger			Battery management				
High voltage MOSFETs	Low voltage MOSFETs	Stand alone PWM controller	Authentication IC	Cell balancing	Low voltage MOSFETs		
<ul style="list-style-type: none"> <li>&gt; 600 V-650 V CoolMOS™ CE</li> <li>&gt; 600 V CoolMOS™ P7 (standard grade)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OptiMOS™ 5 40 V-80 V in TO-220, SuperSO8</li> <li>&gt; StrongIRFET™ 40 V-75 V</li> </ul>	<ul style="list-style-type: none"> <li>&gt; ICE2QS03G</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OPTIGA™ Trust B SLE95250</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OptiMOS™ 30 V in SSO8, S308, DirectFET™</li> <li>&gt; StrongIRFET™ 30 V</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OptiMOS™ 5 in SuperSO8, S308, DirectFET™</li> <li>&gt; StrongIRFET™ 40 V-80 V</li> </ul>		
Gimbal control							
Microcontroller	Angle sensor	LDO	CAN transceiver	Low voltage MOSFETs	Dual n-channel power MOSFET	MOSFET gate driver	
<ul style="list-style-type: none"> <li>&gt; XMC1400 family</li> </ul>	<ul style="list-style-type: none"> <li>&gt; TLI5012B</li> <li>&gt; TLE5009</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IFX1117ME</li> <li>&gt; IFX54441EJV</li> <li>&gt; IFX1763XEJV33</li> </ul>	<ul style="list-style-type: none"> <li>&gt; HS CAN IFX1050G</li> <li>&gt; IFX1050GVIO</li> </ul>	<ul style="list-style-type: none"> <li>&gt; OptiMOS™ 5 25 V-30 V</li> <li>&gt; StrongIRFET™ 25 V-30 V</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IRFHM8363TRPBF, etc.</li> </ul>	<ul style="list-style-type: none"> <li>&gt; IR2101STRPBF, etc.</li> </ul>	

# Demoboards

To shorten customer development cycle time and cost we offer a wide range of application kits:

Microcontrollers			24 GHz radar sensor
XMC1000 motor control application kit	XMC4000 motor control application kit	iMOTION™ modular application design kit (EVAL-M1-099M)	DEMO DISTANCE2GO
			
DPS310 Pressure sensor			
Infineon sensor hub nano EVAL SHNBV01 Sensor hub nano	Infineon wireless sensor hub 2.0 KIT DPS310 2G SHV02	Schuttle boards EVAL SHSBV01-I2C and EVAL SHSBV01-SPI	S2GO PRESSURE DPS310
			

To get further information on our components for multicopter system solutions visit:

[www.infineon.com/multicopter](http://www.infineon.com/multicopter)

[www.infineon.com/evaluationboards](http://www.infineon.com/evaluationboards)

Published by  
Infineon Technologies Austria AG  
9500 Villach, Austria

© 2017 Infineon Technologies AG.  
All Rights Reserved.

Order Number: B131-I0171-V3-7600-EU-EC-P  
Date: 10/2017

#### Please note!

THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THEIR TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

#### Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office ([www.infineon.com](http://www.infineon.com)).

#### Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.