

## Product brief

# TRAVEO™ II CYT3BB/4BB/4BF body MCU series

Microcontrollers for automotive body control



TRAVEO™ II CYT3BB/4BB/4BF body MCU series features Ethernet and FlexRay for secure and fast communication. In addition, TRAVEO™ II includes, analog (see key features) and other features such as memory interface and sound interface for automotive body applications. The TRAVEO™ II family of microcontrollers has a wide range of products for you to choose from.

### Key benefits

- > Single chip solution offering automotive function by Arm® Cortex®-M7
- > Optimized memory footprint for reduced BOM
- > State-of-the-art security with Secure Boot support by a dedicated M0+ core and security hardware to accelerate cryptographic functions
- > Real FOTA support based on security and dual-bank flash
- > Safety (ASIL B) features and analysis report
- > Part of the TRAVEO™ II body MCU portfolio for a wide range of applications and a high level of software re-use

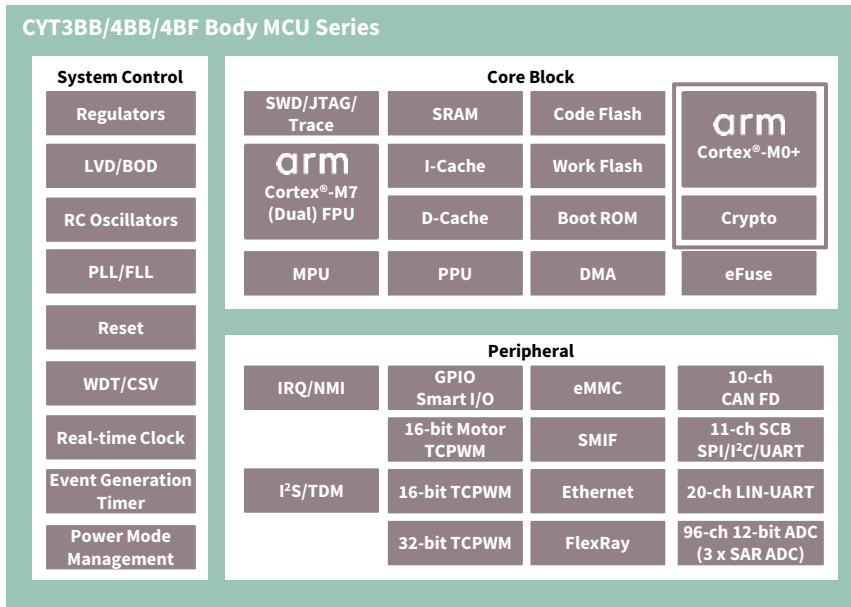
### Key features

- > Arm® Cortex®-M7 Single/Dual CPU
- > Up to 350 MHz operation
- > Up to 8 MB Flash, 256 KB Work Flash, 1024 KB SRAM
- > Dual-bank Flash to support true FOTA
- > Audio Interface: I2S, TDM
- > SDHC Interface: eMMC, SD, SDHC
- > Timers: Up to 12 ch motor control, 87 ch 16-bit timer/counter/pulse-width modulation (TCPWM) and 16 ch 32-bit TCPWM
- > AD Converter: Up to 96 ch, 12-bit with successive approximation ADC (SAR ADC) units
- > Cortex®-M0+ and crypto engine to support EVITA high level HSM
- > eFuse for secure life cycle stage management
- > Connectivity: Up to 2 ch Ethernet and FlexRay, 10 ch CAN-FD, 11 ch SCB, 20 ch LIN-UART
- > 1 ch 130 MHz Serial memory interface (SMIF)
- > ASIL B support (FMEDA)
- > Package: TEQFP-100, -144, -176, BGA-272, -320

# TRAVEO™ II CYT3BB/4BB/4BF body MCU series

Microcontrollers for automotive body control

## Block diagram



## Software and tools

Infinion:

- > Autosar MCAL, STL, FEE
- > HSM Performance Library

3<sup>rd</sup> parties that support TVII:

- > IDEs:
  - Green Hills Multi
  - IAR Embedded Workbench
- > Debug hardware:
  - GHS SuperTrace Probe
  - IAR I-jet, Lauterbach

Evaluation boards:

- > CYTVII-B-E-BB
- > CYTVII-B-H-176-SO
- > CYTVII-B-H-4M-176-CPU
- > CYTVII-B-H-4M-272-CPU
- > CYTVII-B-H-8M-320-CPU
- > CYTVII-B-H-8M-176-CPU

## Product overview – key derivatives

Product Name	CPU Freq. (MHz)	Power Supply (V)	Flash (Code+Work)	RAM	12bit ADC(ch)	CAN FD (ch)	SCB (ch)	LIN (ch)	Ethernet (ch)	FlexRay (unit)	eMMC (ch)	Security	Package
CYT3BB5CE	250	IO:2.7 to 5.5 High Speed I/O: 2.7 to 3.6 Core: 1.05 to 1.15	4096+256	768	39	8	9	9	1	0	1	eSHE&HSM	TEQFP-100
CYT3BB7CE					54	8	10	12	1	0	1		TEQFP-144
CYT3BB8CE					64	8	10	16	1	0	1		TEQFP-176
CYT3BBBCE					72	8	11	16	1	0	1		BGA-272
CYT4BB5CE	2x250	IO:2.7 to 5.5 High Speed I/O: 2.7 to 3.6 Core: 1.05 to 1.15	4096+256	768	39	8	9	9	1	0	1	eSHE&HSM	TEQFP-100
CYT4BB7CE					54	8	10	12	1	0	1		TEQFP-144
CYT4BB8CE					64	8	10	16	1	0	1		TEQFP-176
CYT4BBBCE					72	8	11	16	1	0	1		BGA-272
CYT4BF8CD	2x350	IO:2.7 to 5.5 High Speed I/O: 2.7 to 3.6 Core: 1.05 to 1.15	8384+256	1024	81	10	10	17	1	1	1	eSHE&HSM	TEQFP-176
CYT4BF8CH					96	10	11	20	2	1	1		BGA-272
CYT4BF8CCH					96	10	11	20	2	1	1		BGA-320

www.infineon.com

Published by  
Infineon Technologies AG  
81726 Munich, Germany

© 2021 Infineon Technologies AG.  
All Rights Reserved.

Document number: B158-I1143-V1-7600-JP-EC  
Date: 04 / 2021

### 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).

### Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office. Infineon Technologies Components may only be used in life-support devices or systems with the expressed written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system.

Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.