

TC264D40F200WBCKXUMA1

Data Sheet

MCU 32-bit TriCore RISC 2.5MB Flash 3.3V/5V Automotive 144-Pin LQFP EP T/R

Manufacturers <u>Infineon Technologies Corporation</u>

Package/Case 144-LQFP

Product Type Embedded Processors & Controllers

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for TC264D40F200WBCKXUMA1 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

SAK-TC264D-40F200W BC belongs to the AURIXTM TC26xD family. Its innovative multicore architecture, based on up to three independent 32-bit TriCore CPUs, has been designed to meet the highest safety standards, while simultaneously increasing performance significantly. Products of the TC26xD are equipped with a dual TriCore with up to 200 MHz, a single voltage supply of 5V or 3.3V and a Powerful Generic Timer Module (GTM) to aim for reduced complexity, best-in-class power consumption and significant cost savings.

Key features:

Dual TriCore with 200MHz/ DSP functionality

2.5MB Flash w/ ECC protection

240KB RAM w/ ECC protection

48x DMA channels

3x Delta-Sigma ADC converters

48x 12bit SAR ADC converter

Powerful Generic Timer Module (GTM)

Sensor interfaces: 6xSENT,3xPSI5, 1xPSI5S

 $State\ of\ the\ art\ connectivity: Ethernet\ 100\ Mbit\ ,\ 1x\ FlexRay, 4xASCLINs,\ 4xQSPI\ ,\ 1xI^2C\ ,\ 2xMSC\ ,\ 1xHSSL\ ,\ I^2S\ emulation,\ 5xCANBC\ ,\ 1xHSSL\ ,\ I^2S\ emulation,\ 5xCANBC\ ,\ 1xHSSL\ ,\ I^2S\ emulation,\ 5xCANBC\ ,\ I^2S\ emulation,\ I^2S\$

including data rate enhanced CAN FD

Single voltage supply 5V or 3.3V

Ambient temperature range -40C°...+125C° Most innovative safety: Diverse Lockstep Core with clock delay Redundant and diverse timer modules (GTM, CCU6, GPT12) Access permission system Safety management unit (SMU) Direct Memory Access (DMA) I/O, clock, voltage monitor Developed and documented following ISO 26262 to support safety requirements up to ASIL-D AUTOSAR V3.2 and V4.x **Applications: Industrial applications:** Safety applications: Industrial robots (adviced forthis product) Air bag System Solar panels Chassis domain control Wind turbine inverters Braking IO controller Pixel lighting Servo drives Scable EPS solution Full feature sensor fusion Elevators Inverters Multi-purpose camera Active suspension control system Automotive 24 GHz radar system Highly integrated automotive 77 GHz radar chipset Sensor fusions

PG-LQFP-144 Package

Connectivity Applications:

Wireless Charging Solution

Advanced gateway architecture

Telematic Control unit and V2X

High-feature Body Domain Control unit

Powertrain applications:

Transfercase

Gasoline multi-port injection – discrete solution

Gasoline direct injection

Driving Domain Controller (DDC):

Automatic transmission - hydraulic control

Double-clutch transmission – hydraulic control

Double-clutch transmission – electrical control

Transportation applications:

Commercial and Agricultural Vehicles (CAV)

CAV 24 GHz radar

Commercial and Agricultural Vehicles (CAV)

Drones/Multicopters

(H)EV applications:

(H)EV battery management system

EV charging station

(H)EV main inverter

DC-DC Converter

Related Products



SAK-TC1766-192F80HL

Infineon Technologies Corporation LQFP176



SAK-TC1767-256F80HLAD

Infineon Technologies Corporation LQFP-176



SAK-TC1796-256F150EBD

Infineon Technologies Corporation **BGA**



SAK-TC1797-512F180E

Infineon Technologies Corporation 416-BBGA



SAK-TC1764-128F80HLAA

Infineon Technologies Corporation LQFP-176



SAK-TC1796-256F150EBC

Infineon Technologies Corporation BGA

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SAK-TC1767-256F133HL

Infineon Technologies Corporation QFP-176