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> AURIX™ Family – TC27xT > SAK-TC277TP-64F200S CA

Overview

Parametrics

Documents

Order

Boards

Support

SAK-TC277TP-64F200S CA

Summary of Features:

- Triple TriCore™ with 200MHz
- TriCore™ DSP functionality
- Up to 4MB Flash w/ ECC protection
- 384KB EEPROM @ 125k cycles
- Up to 472KB RAM w/ ECC protection
- 64x DMA channels
- 6 diff.ch. Delta-Sigma ADC
- 8x 12-bit fast ADC with up to 60 analog input channels
- Powerful Generic Timer Module (GTM)
- SENT, PSI5, PSI5S sensor interfaces
- Ethernet 100Mbit
- FlexRay, CAN, CAN FD, LIN, SPI
- Programmable HSM (hardware security module)
- Single voltage supply 5V or 3.3V
- LFBGA-292 package, 17x17mm small

Target Applications:

- Domain Control
- Advanced Drive Assistent Systems
- High end ESC
- Sensor fusion
- Engine Management Systems
- Transmission Control Units
- Inverter and Battery Management
- Systems for hybrid and electrical vehicles

Solution Finder

- MOSFET
- IGBT
- Vreg
- MCU
- More

Voltage I_D (max) $\geq$ A $R_{DS(on)}$ (max) $<$ m Ω [Reset](#)

Type

SAK-TC277TP-64F200S CA

Parametric	SAK-TC277TP-64F200S CA
Clock Frequency max	200.0MHz
SRAM (incl. Cache)	472.0kByte
CAN Nodes	4
A/D Input Lines	60
Program Memory	4.0MByte
Type of Memory	Flash
FlexRay™	yes
Number of ADC Modules	14.0
EEPROM Emulation	yes

Instruction Width ([bits])	32/16
Instruction Set Architecture	TriCore™ v1.6E (32-bit)
Instruction Set Architecture	TriCore™ v1.6P (32-bit)
DMA Channels	64
External Bus Interface	no
Fast Flash Programming	no
Temperature	-40 to 125°C
DSP Functionality	yes
On-chip Clock Generation	yes
I/O Operation Voltages	3.3V
I/O Operation Voltages	5.0V
Touch/LED Matrix Control	no
On-chip Voltage Regulator	yes
Real Time Clock	yes
Floating Point Unit	yes
Watchdog Timer	yes
Oscillator Watchdog	yes

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Application Notes

Title	Size	Date	Version
AP3224421 AURIX SYSPLL Frequency Modulation > EN	2.6 MB	30 Mar 2016	02_01
EMC and System-ESD Design Guidelines for Board Layout > EN	2.9 MB	15 Mar 2016	03_05

SAK-TC277TP-64F200S CA

Sales Product Name	SAK-TC277TP-64F200S CA
OPN	TC277TP64F200SCAKXUMA1
Product Status	active and preferred
Order online	
Package Name	PG-LFBGA-292
Completely lead free	yes
Halogen free	yes
RoHS compliant	yes
Packing Size	1000
Packing Type	TAPE & REEL

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Evaluation Boards

Board	Family	Description	Status
> KIT_AURIX_TC275_TFT	Microcontroller	To simplify the development of your own application, the kit is supplied with a variety of on-board components including a highly integrated software development environment that gives you everything you need to compile, debug, and flash your AURIX™ multi-core application. • 3V Lithium Battery • AURIX™ Application Board • Link to the Free TriCore Entry Tool Chain	active and preferred
> KIT_AURIX_TC275_S_TRB	Microcontroller	For evaluation of SAK-TC275T including Getting Started, free Tricore Entry Tool Chain , technical documentation, compiler and debugger. USB cable for power supply and extension board. • TC275T	active and preferred

› KIT_AURIX_TC275_TRB	Microcontroller	For evaluation of SAK-TC275T including Getting Started, free Tricore Entry Tool Chain , technical documentation, compiler and debugger. USB cable for power supply and extension board. • TC275T	coming soon
› KIT_AURIX_TC277_S_TRB	Microcontroller	For evaluation of SAK-TC277T including Getting Started, free Tricore Entry Tool Chain , technical documentation, compiler and debugger. USB cable for power supply and extension board. • TC277T	active and preferred
› KIT_AURIX_TC277_TFT	Microcontroller	• SAK- TC277TP-64F200S	active and preferred
› KIT_AURIX_TC277_TRB	Microcontroller	For evaluation of SAK-TC277T including Getting Started, free Tricore Entry Tool Chain , technical documentation, compiler and debugger. USB cable for power supply and extension board. • TC277T	coming soon
› KIT_ATV_24GHZ_RADAR	Microcontroller	• BGT24A transceiver MMIC family, e.g. BGTA24ATR12 • AURIX™ 32-bit radar microcontroller family, e.g. SAK-TC264DA- 40F200	active and preferred
› HYBRID KIT2 ENH SIL	IGBT Modules	Evaluation Kit including HybridPACK™ 2 Enhanced power module and driverboard with EiceDRIVER™ SIL 1EDI2002AS, EiceDRIVER™ Boost 1EBN1001AE and AURIX™ 32-bit multicore microcontroller TC277	on request

- AURIX™ 32-bit multicore microcontroller TC277
- EiceDRIVER™ Boost 1EBN1001AE
- EiceDRIVER™ SIL 1EDI2002AS
- HybridPACK™ 2 Enhanced FS800R07A2E3_B31

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E-Mail*

Phone

Company*

Company website (URL)

Industry*

[please select]



Other Industry

Country*

[please select]



Preferred Distributor / Reseller*

[please select]



Other Distributor / Reseller

Product Name*

Estimated annual production volume (pieces) per year*

[please select]



Please post your technical question as detailed as possible*

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