

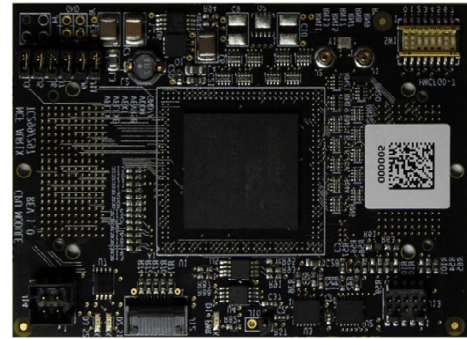


REDLINE™

RAPID ENGINEERING DEVELOPMENT SYSTEMS

Modular Platforms Designed by Engineers for Engineers

AURIX™ TC299/297/277 MCU Platform Module



Overview

Designed for use with either REDline Carrier board, or as a standalone development platform, this Module can host a number of AURIX™ MCU derivatives.

The Module also supports easy integration into the customer's target platform as MCU pins are routed out to two 200 position pad arrays on the bottom.

All important standalone operations are made possible by incorporating essential power conversion, clock, system configuration, programming and debugging connections on the Module itself.

Separated Analog and Digital domains make full use of MCU's 12-bit Analog-to-Digital Converters.

The supplied software (Board Support Package) has all necessary parts for MCU boot configuration, start-up, and multicore operations, all written in C code.

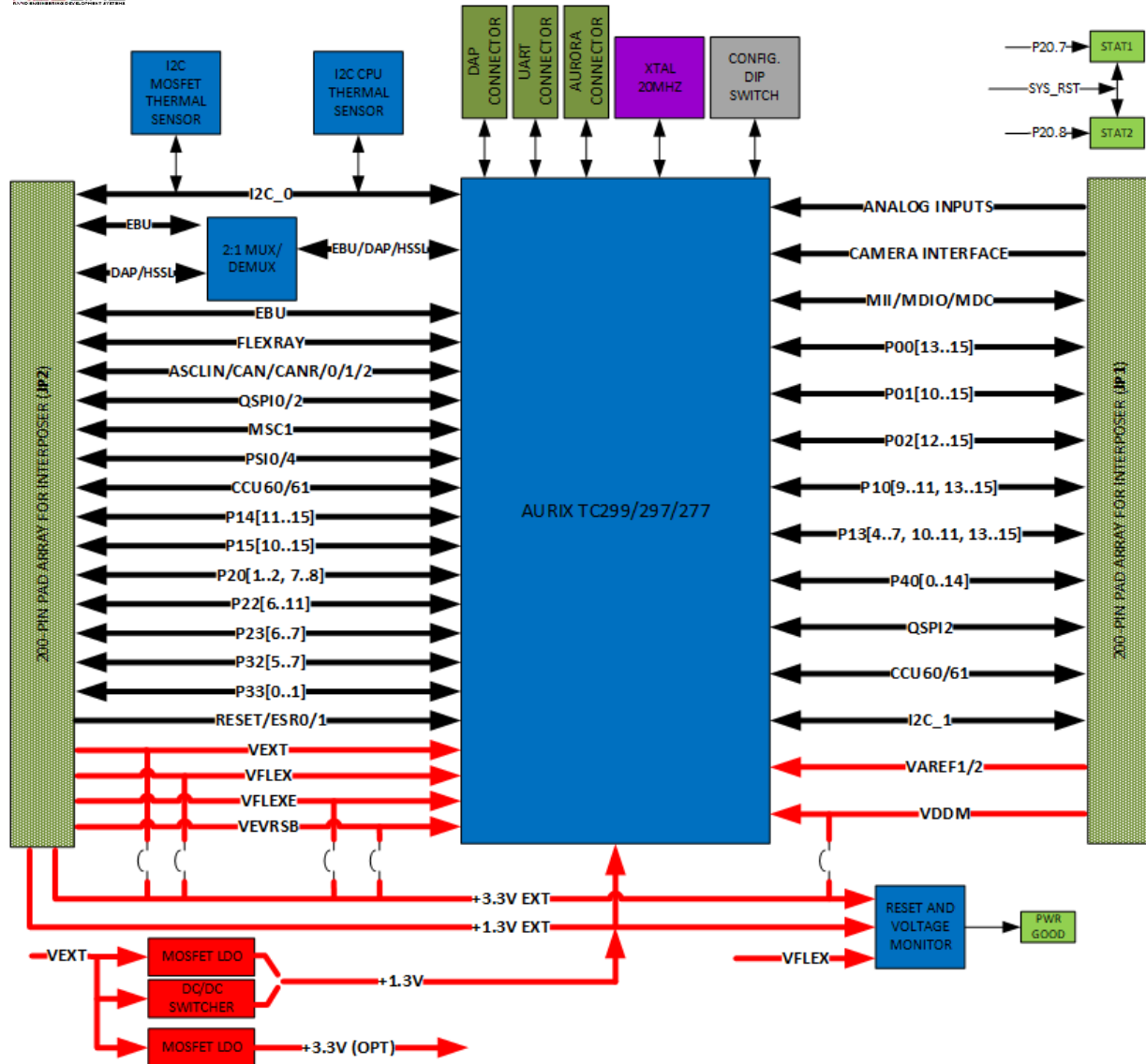
Complete hardware development support: schematics, BOM, layout, gerbers, PCB stack-up, and high-speed design rules.

Features

- Infineon AURIX™ SAK-TC29x MCU pin-compatible versions (299/297/277)
- Up to 3 cores @300MHz, 8MB flash, 2.7MB SRAM with HSM and ADAS
- Default 20MHz crystal with optional socket for custom crystal
- Core voltage SMPS for 1.3V generation (optional LDO) and 5V to 3.3V LDO for I/O supply
- Infineon DAP 10-position programming and debugging header (or alternative JTAG)
- Generic UART/CLI 4-pin header with USB cable
- High-speed AURORA trace buffer connector for Emulation Devices
- MCU and LDO temperature sensors connected to on-board I²C bus
- System and MCU configuration 8-position DIP switch
- "No solder" headers to configure Module in standalone mode and external power
- Critical voltage rails' supervisor with LED
- User status and Reset LED
- Very compact design for easy target integration, line-up compatible with remaining TC2xx series

Block Diagram

REDLINE
AND ASSOCIATED DEVELOPMENT PLATFORM



Compatibility

The Module is designed to work with AURIX™ Base Carrier Development Platform

Part Number: **RDL-DEVCDP-00x**

Ordering Information

Module Part Number: **RDL-MCU29w-SSxx-EVR13yy-zzz** (see datasheet for exact ordering options)

Supplier: Neutron Controls, 350 Palladium Drive, Suite 102 Ottawa, Ontario, Canada K2V 1A8

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