

Quad-Core








Vehicle Navigation Processor

Overview

The T3 processor represents Allwinner's latest achievement in the smart automotive sector. The processor is ideal for applications that require 3D graphics, advanced video processing, rich user interfaces, low power consumption and a high level of system integration. The T3 delivers the kind of high level user experience we are used to in portable consumer devices and transitions it into the environment of modern vehicles.

In addition to its high level of performance it also supports driver safety features, a video record feature and an array of inputs and connectivity options for other devices.

Highlights

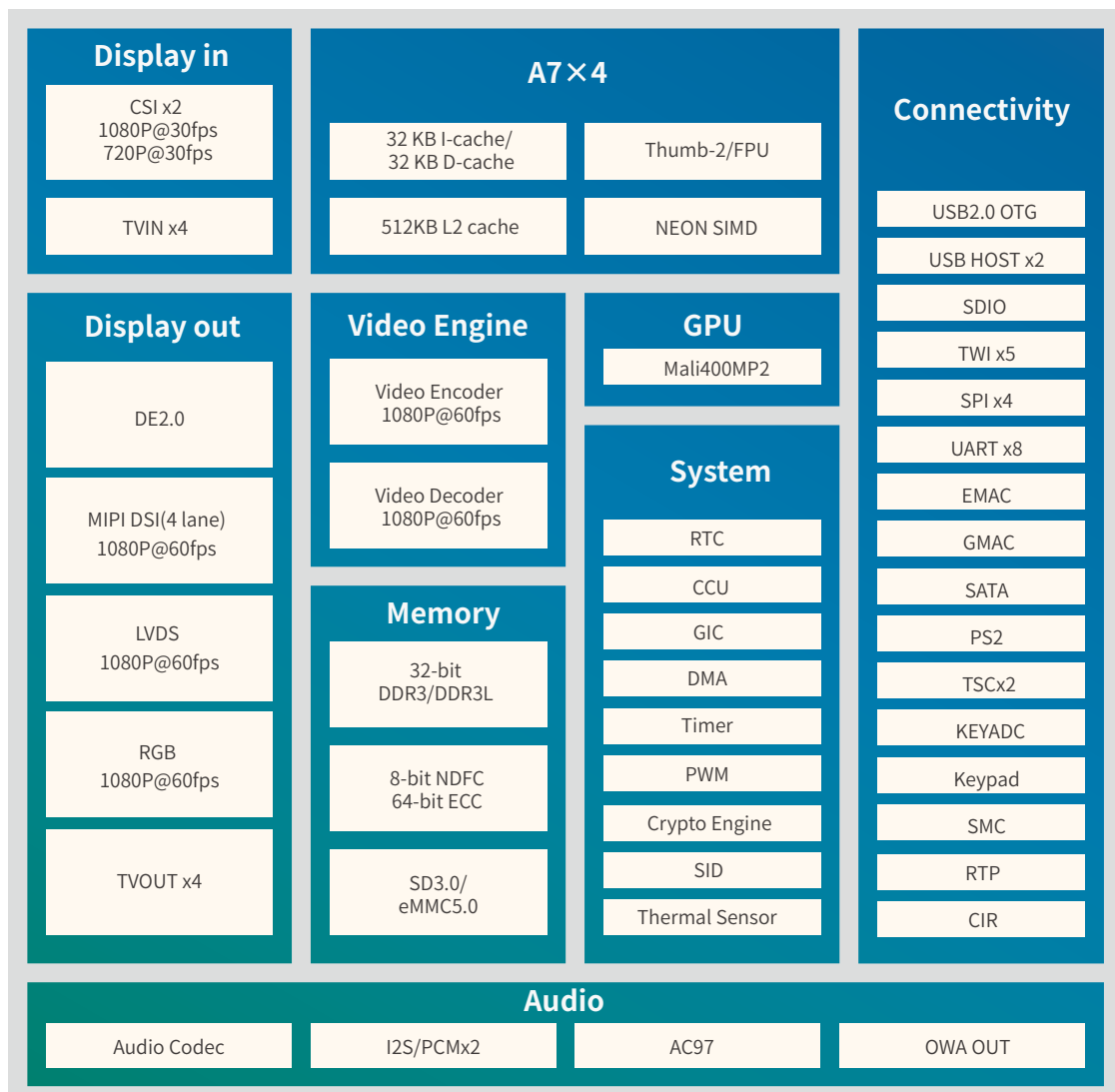
-  Content can be displayed on either 4-lane MIPI DSI displays, an RGB panel or a LVDS panel.
-  Integrated audio codec with 24bit/192KHz DAC playback, and supports I2S/PCM interface for connecting to an external audio codec. I2S/PCM interface includes eight channels of TDM with sampling precision up to 32bit/192KHz.
-  Supports dual CMOS sensor parallel interfaces and 4-channel TVIN , which is capable of executing multi-channel video recording.
-  High-definition (HD) H.264 video encoder with a resolution of 1080p@45fps.
-  To reduce the total system cost, the T3 has an extensive range of support for hardware peripherals allowing for an array of configurations, supporting standards such as CAN ,UART, RTP, SPI,CIR,USB2.0 OTG, TWI, etc.
-  Supports Linux3.10 and Android 4.4/6.0 system
-  Operating temperature parameters: -40°C- 85°C

Features

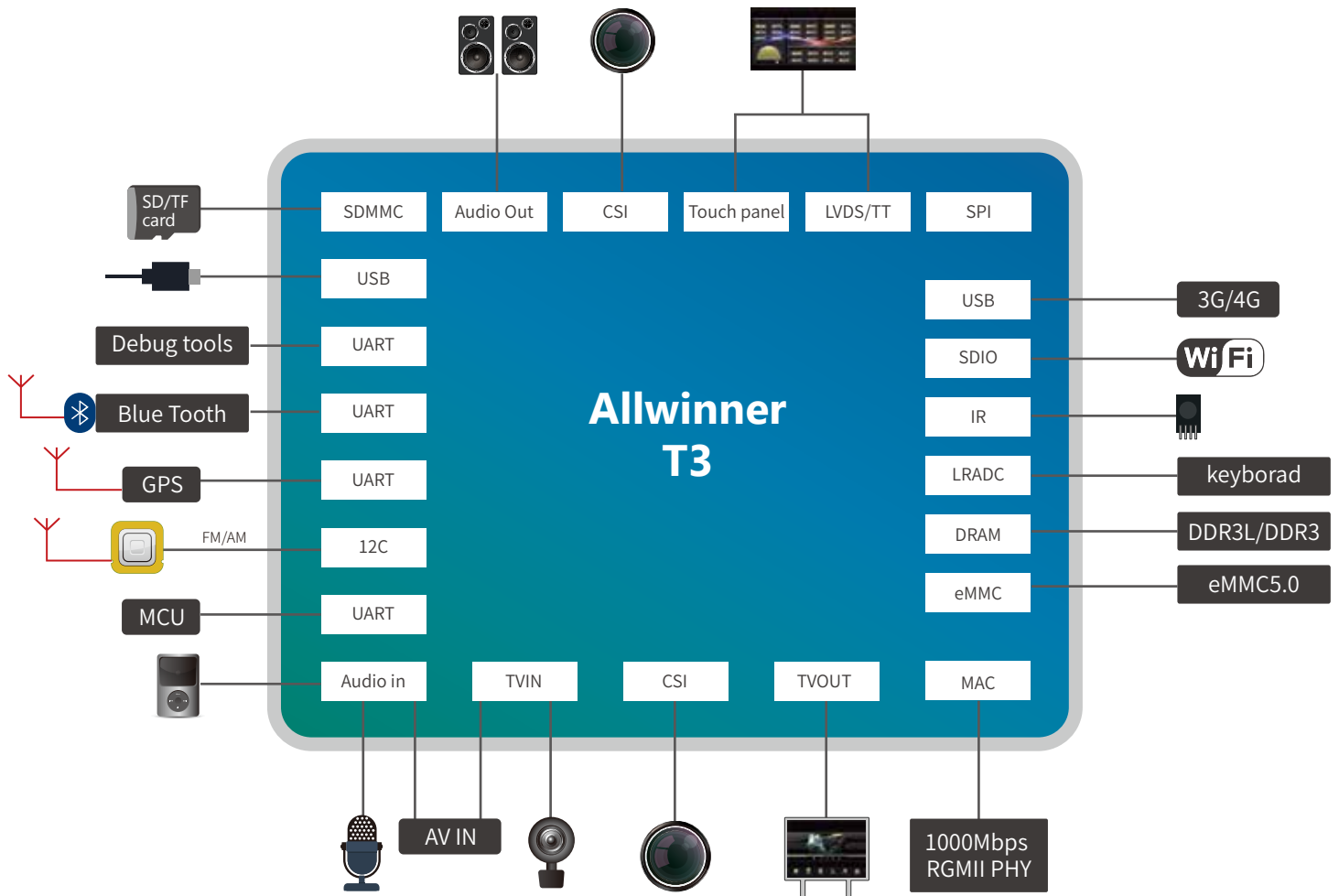
CPU	<ul style="list-style-type: none"> • Quad-core Cortex™-A7
GPU	<ul style="list-style-type: none"> • Mali400 MP2

Display Out	<ul style="list-style-type: none"> • 4-lane MIPI DSI displays, or RGB panel, or LVDS panel • 4-channel TV-out
Display In	<ul style="list-style-type: none"> • Dual CMOS sensor parallel interfaces • 4-channel TV-in
Video Encoding	<ul style="list-style-type: none"> • High-definition(HD) H.264 video encoder is up to 1080p@45fps
Video Decoder	<ul style="list-style-type: none"> • Video decouping to 1080p@45fps • Supports multi-formats
Peripherals	<ul style="list-style-type: none"> • USB x 3/SATA x 1 • UART x 8/SPI x 4/Smart Card x 1/TS x 2/TWI x 5 • MAC x 2/PS2 x 2/KEYPAD x 1(8 row 8 column)/IR-RX x 2/KEYADCx 2/RTP
Package	<ul style="list-style-type: none"> • FBGA 468 balls,0.65mm ball pitch, 16mm x 16 mm
Operating Temperature	<ul style="list-style-type: none"> • -40°C~85°C

Block Diagram



Application Diagram



ABOUT ALLWINNER

Allwinner Technology is a leading fabless design company dedicated to smart application processor SoCs and smart analog ICs. Its product line includes multi-core application processors for smart devices and smart power management ICs used by brands worldwide.

With its focus on cutting edge UHD video processing, high performance multi-core CPU/GPU integration, and ultra-low power consumption, Allwinner Technology is a mainstream solution provider for the global tablet, internet TV, smart home device, automotive in-dash device, smart power management, and mobile connected device markets. Allwinner Technology is headquartered in Zhuhai, China.

CONTACT US

For more product info, please contact service@allwinnertech.com, or scan the QR code to follow us on Wechat.

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