Model Information

■ Features

- Sitara AM3352 Cortex-A8 @ 600MHz
- 256MB DDR3
- 256MB NAND Flash (for boot)
- 1 x microSD-Slot
- 2 x LAN (1 Gigabit, 1 Fast Ethernet)
- 1 x USB 2.0 Host
- 1 x RS232/422/485
- 1 x WLAN 802.11b/g/n (optional)
- 1 x antenna socket (optional)
- Low Power, fanless, no cables
- Operating Temperature −20°C - 65°C
- Debian GNU/Linux
- DIN RAIL mountable
- Starter kit available

Contact Online...

Baltos iR 2110

Quick Link: | **Features** | **More Pictures** | **Overview** | **System** | **Serial Ports** | **Power and Environment** | **Mechanical** |
Software Specifications | **Ordering Information** | **Options** | **Packaging** |

■ More Pictures

Click on the thumbnails for the large picture ...

>Back to top

■ Overview

OnRISC Baltos iR 2110 is a fanless industrial embedded PC in compact dimensions, designed for DIN Rail mounting. It is based on an ARM Cortex-A8 with NEON SIMD Coprocessor, up to 1GHz CPU clock speed. Low power consumption, wide temperature range -20°C to 65°C and flexible power supply (12-50V DC) make it an ideal system for industrial automation.

WLAN is available as usual, two locations for the antenna socket are provided. Models with further extended temperature range are available, allowing for remote installations.

The great variety of interfaces like LAN, serial port and USB makes it easy to connect various industrial devices and field buses to the Baltos.

The embedded computer runs Linux on ARM operating system Kernel 3.18. This system is installable on the internal NAND Flash memory, or on an microSD card in the front side slot. For boot from NAND Flash a system configuration with buildroot is supported. With Debian's repository database it is easy to install and update the free software on the Baltos. VS provides information for configuration and sample installations of Linux for Baltos.

■ System

Hardware	• Sitara AM3352 ARM Cortex-A8 RISC CPU @ 600MHz • 256MB DDR3 • Real time clock with battery backup
Mass Storage	• 256MB NAND Flash memory (bootable)

	SD 2.0 / SDHC microSD-card slot (bootable)
Network	• 1x 1000/100/10 Mbps Gigabit Ethernet • 1x 100/10 Mbps Fast Ethernet
Serial Peripherals	• 1x USB 2.0 Host • 1x RS232/422/485 high speed
LED	• 1x Power, 1x WLAN, 1x Application • LAN: 2x Link and Speed • COM: TxD and RxD
DIP Switch	4x external switches, free for use by customers application

■ Serial Ports

Features	• 1x RS232/422/485 • Highspeed UART, 64 Byte FIFO (16C750) • RS232: up to 921.6/1000 kbps • RS422/485: up to 3.7 Mbps
Available Modes	Configured by Software • RS232 • RS422 full duplex • RS485 4-wire, full duplex • RS485 2-wire, half duplex, without echo
Signals	• RS232: TxD,RxD, RTS,CTS, DTR,DSR, DCD, RI, GND • RS422: Tx+/-, Rx+/-, GND • RS485 2–wire: Data+/-, GND • RS485 4–wire: Tx+/-, Rx+/-, GND
RS485 Data Direction Control	Driver Automatic via RTS

■ Power and Environment

Power	• Input 9 - 54V DC • 0.2A @ 12V minimal • 0.5A @ 12V max. • 3-pin Terminal block connector
Temperature	• Operating −20°C - 65°C • Storage: −30°C - 85°C • Humidity: 10-85% non-condensing
MTBF	n.a.
Approvals	• EMC: FCC Class A, CE Class A • Environment: RoHS

■ Mechanical

Dimensions	115×73×25 mm³ (W×L×H)
Weight	0.25kg
Construction Material	0.8mm Metalsheet silver
Mounting	• DIN Rail • Wall mount

■ Software Specifications

Debian:

Linux	Latest stable release available as ready-to-run SD card image or can be built/customized via vsdebootstrap project ([Github](#))
	Buildroot:
	BSP with Kernel and bootloader patches and basic configuration ([Github](#))
	Yocto:
	layer-baltos with Kernel and bootloder patches suitable for new projects or integration into already available projects ([Github](#))
	Buildroot and Yocto are suitable for installation to NAND Flash

■ Ordering Information

6833	OnRISC Baltos iR 2110

■ Options

6689	WLAN Kit internal internal module 802.11b/g/n, pigtail and antenna Purchase time option, not for later retrofitting
6690	WLAN Kit external USB stick 802.11b/g/n, antenna
6031	Power supply adapter 12V DC, 1A
Request	Boot microSD with Debian GNU/Linux installed (4/8GB)
6692	DK-NCP DIN-Rail mounting kit
6693	WK-NCP Wallmount kit
6835	Starter Kit ● 4GB microSD card for Linux ● Power adapter 12V @ 1A ● Documentation and Development Software on DVD

■ Packaging

Packing list	● OnRISC Baltos iR 2110 system ● Terminal block for Power Supply

Baltos iR 2110