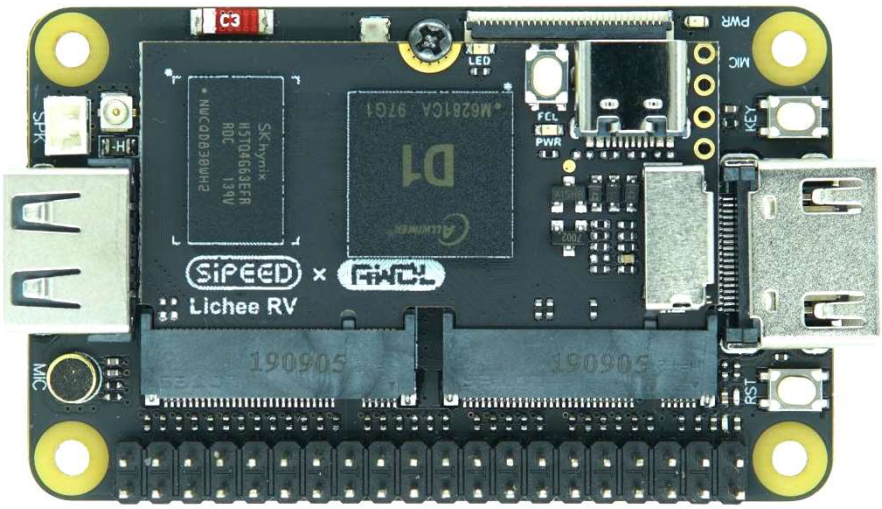
Lichee RV Dock

Datasheet v1.1



Characteristic:

- Support Lichee RV core board
- Onboard display connector
- Onboard 2.4G WIFI+BT module and SMT Antenna
- Onboard USB-A female connector
- On board speaker driver and its connector
- On-board electret microphone circuit

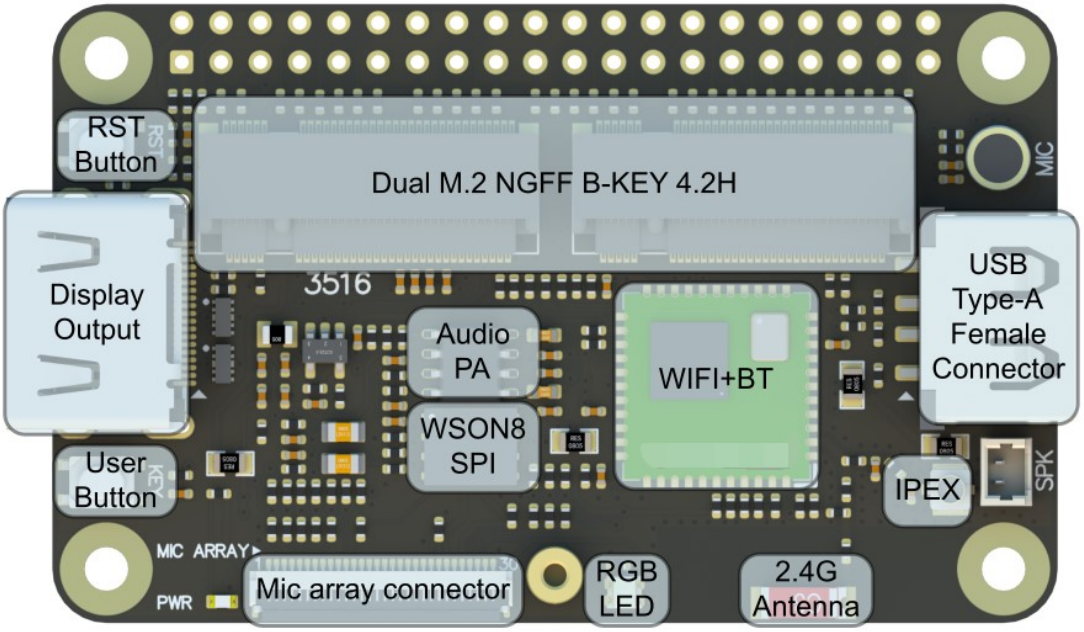
Update record of this document	
V1.0	Edited on December 15, 2021; Original document
V1.1	Edited on January 15,2022; Fix errors on pictures

Hardware overview	
Supported core board	Lichee RV
Display output interface	Onboard a display output connector RGB screen signal and MIPI screen signal are connected to 2x20p pin pad (Users can use our screen adapter board to drive the screen of RGB interface or MIPI interface)
Network connections	Onboard 2.4G WIFI+BT module , SMT Antenna , IPEX connector
USB	Onboard a USB-A female connector
Audio	On board speaker driver and its connector（Supports up to 4 Ω 3W speakers） On-board electret microphone circuit
Storage	A SOP8 pad is reserved to connect SPI interface. Components are not welded by default
Expansion connector	Onboard 30P FPC connector, which can be directly connected to our Mic Array R6
GPIO expansion	GPIO is led out through 2x20p 2.54mm pad for user use
LED	Onboard a WS2812 RGB LED On board a power indicator light
Button	Onboard a RST button Onboard a user button

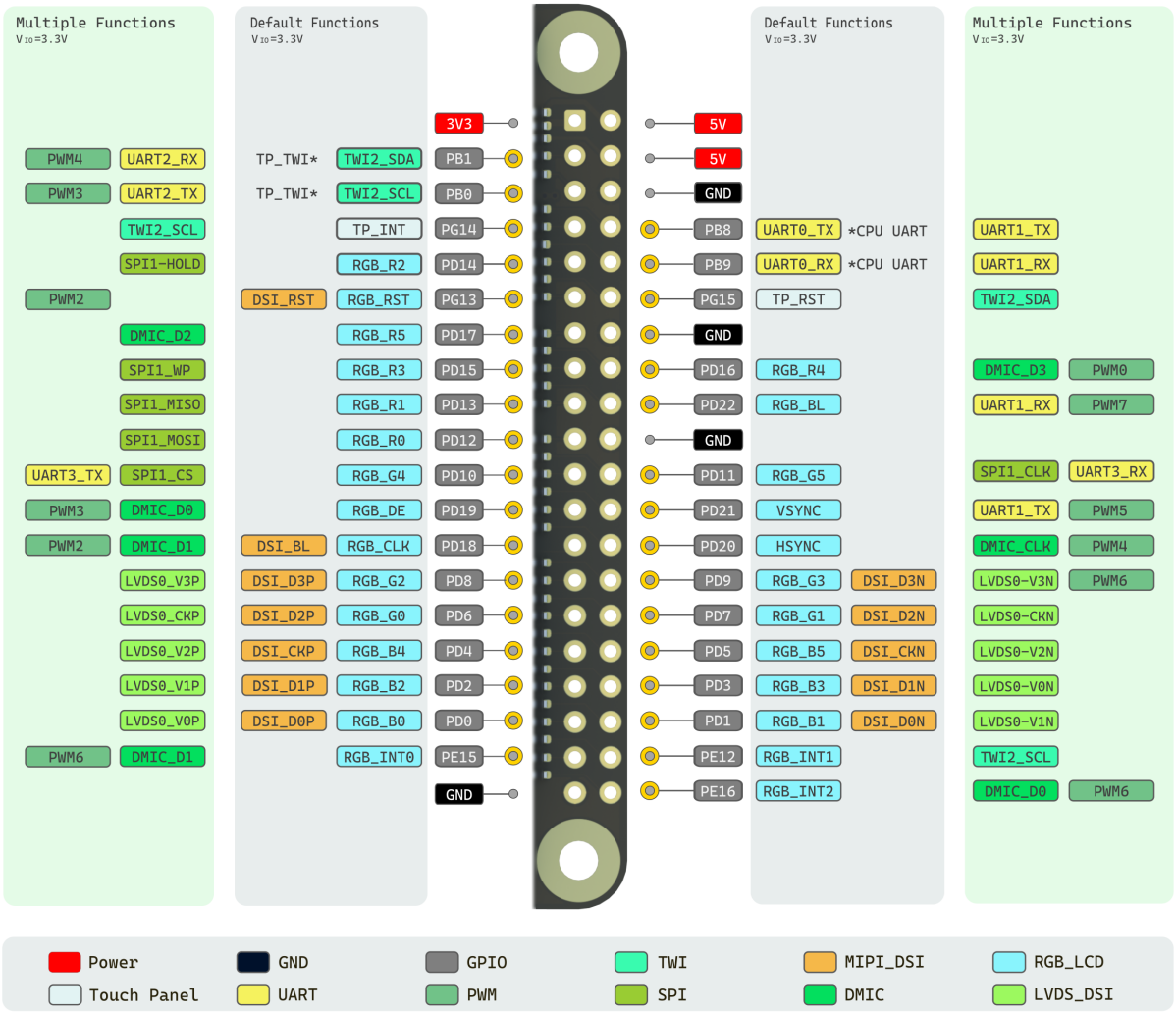
Software overview	
System	Tina Linux(Based on OpenWRT 14.07), Debian
	YoC (RTOS)
BSP	Tina SDK from AllWinnerTech (register and download from https://open.allwinnertech.com/)
Supported development language	C/C++, Python, Golang, etc...
UI&YoC resources	https://occ.t-head.cn/

Working conditions	
Power supply	Type-c connector or DEBUG Pins VCC：5V±10%, 0.5A max
Temperature rise	<30K
Temperature range	0℃ ~ 65℃

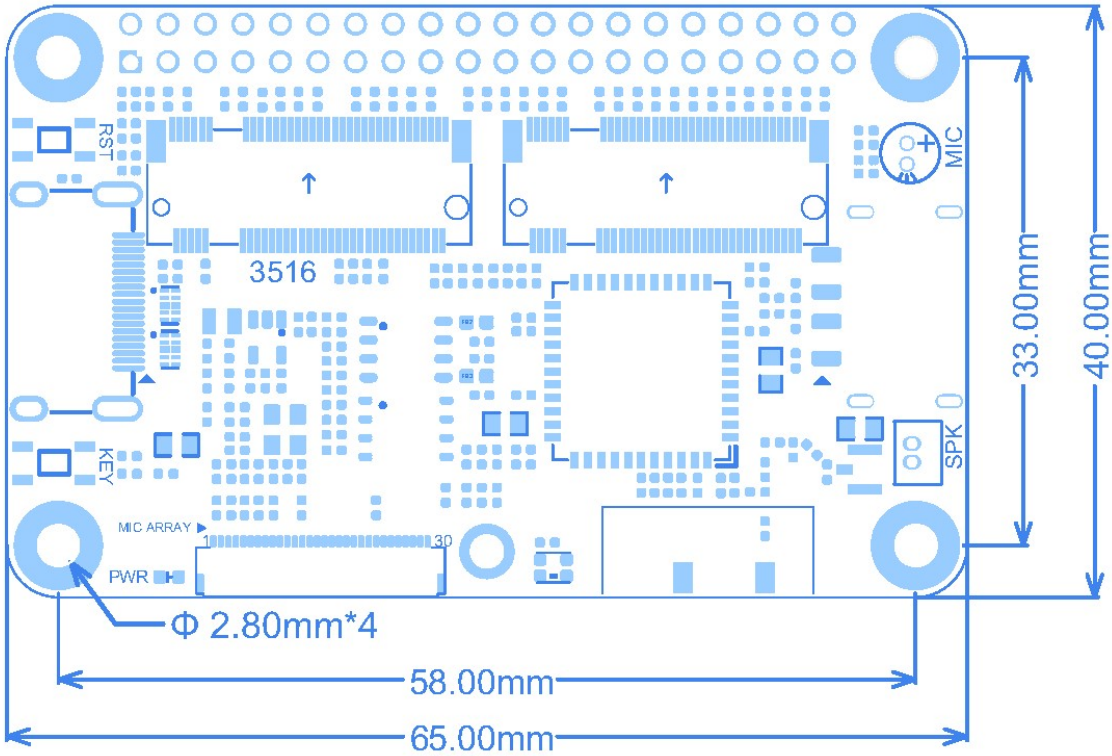
Functional annotation



Pin annotation



Dimension information	
Length	65.0mm
Thickness	40.0mm
Thickness	Please check the 3D drawing



Notice	
ESD protection	Please pay attention to avoid static electricity hitting PCBA; Please discharge the human static electricity before touching PCBA
GPIO voltage	Please do not let the actual working voltage of GPIO exceed the rated value, otherwise it will cause permanent damage to PCBA
FPC connector	When connecting the FPC cable, make sure that the cable is completely inserted into the connector
Plug/unplug	Please disconnect the power completely before removing the core board
Avoid short circuit	Please avoid any liquid or metal touching the pads of components on PCBA during power on, otherwise it will cause short circuit and damage the PCBA
Special GPIO	• GPIO : PC4,PC5 Don’ t use them for GPIO as better，or please refer to <D1_Datasheet_V0.1>

Resources	
Official website	www.sipeed.com
BBS	http://bbs.sipeed.com OR https://occ.t-head.cn/
E-mail	support@sipeed.com
Allwinner Tech SDK	https://open.allwinnertech.com/
Allwinner Tech Development docs	https://d1.docs.allwinnertech.com
Waft UI Document	https://occ.t-head.cn/
E-mail (for business cooperation)	support@sipeed.com