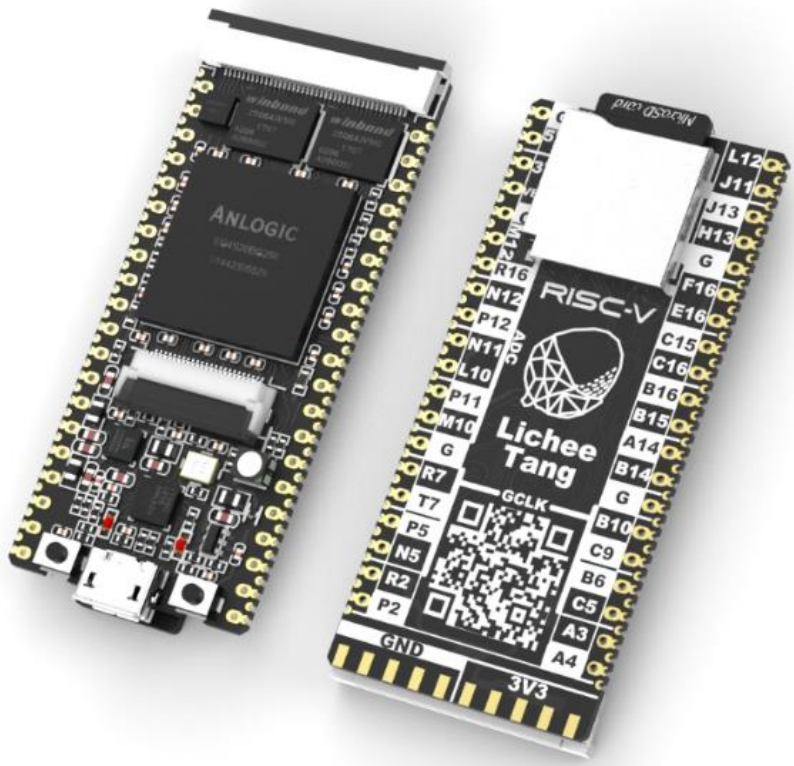
Sipeed Lichee Tang Specifications v1.0

- EG4S20
- 20K logic unit
- About 130KB SRAM
- Built-in 32bit width 64MBit SDRAM
- Many LVDS pins
- Built-in 12-bit 1MSPS ADC



SiPEED

Version 1.0
Sipeed

www.sipeed.com

Functional Overview	
Core unit	Anlogic Technologies EG4S20
Logical unit	20K (LUT4/LUT5 hybrid architecture)
SRAM	About 130KB
SDRAM	Built-in 32bit bit width 64MBit
Flash	FPGA configuration Flash, 8Mbit User Flash, nor/nand optional
interface	FPC40P socket, can be connected to RGB LCD, VGA adapter board FPC24P socket, can be connected to DVP camera, high speed ADC module Resistive touch screen controller for I2C interface, used with RGB LCD
Pin and lead	The adjacent pins LVDS are drawn in the same length, leading out 8 GCLKs, and all 8 ADCs are taken out. Double row pin spacing 900mil, compatible with breadboard development Half hole leads to an extra 40 IO, and the whole board leads to 130+ IO
Electrical characteristics	Micro USB 5V power supply; 2.54mm pin 3.3V~5V power supply; 1.27mm stamp hole power supply 3-channel DCDC power supply chip, stable and efficient power supply, independent adjustment of Bank0 IO level
Download and debug	Onboard FPGA JTAG Download Debugger RV debugger can debug hummingbird core

Software function

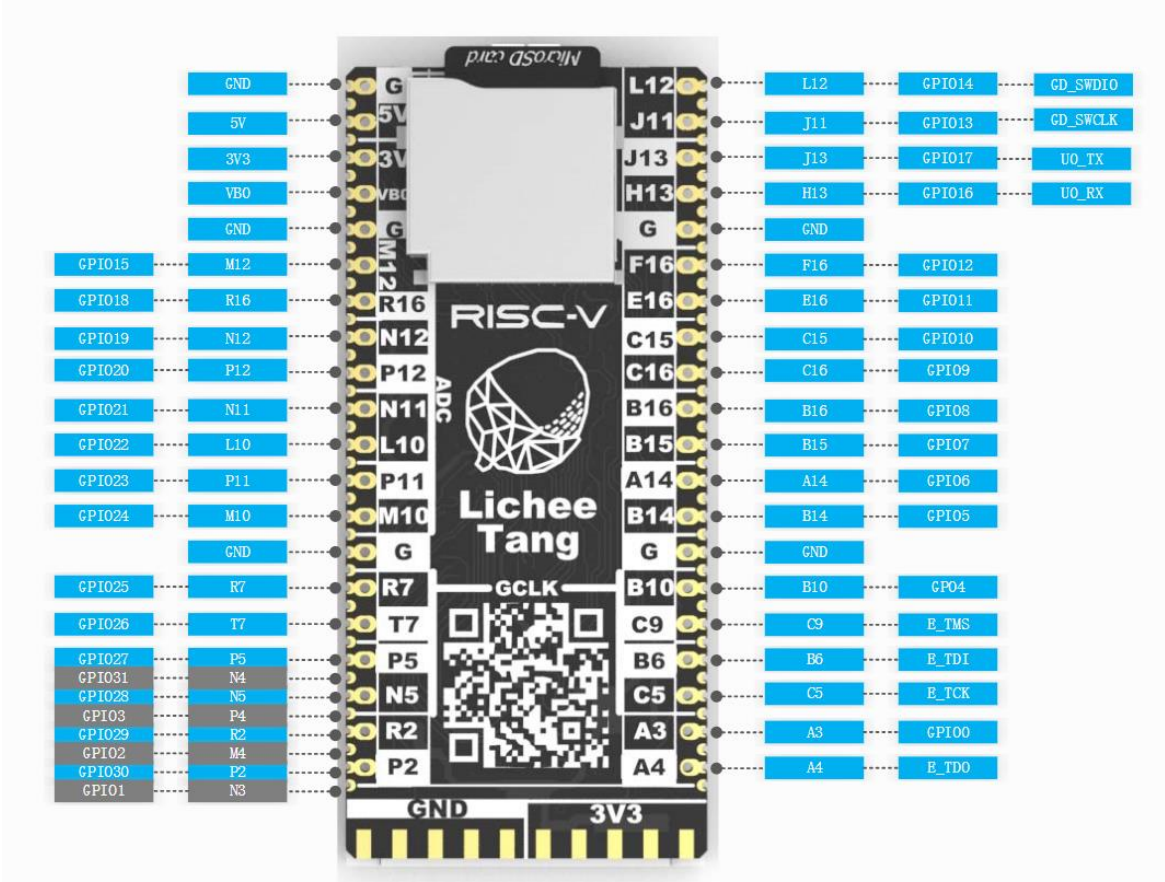
Integrate, download, debug features with TD IDE

IDE has a rich IP core

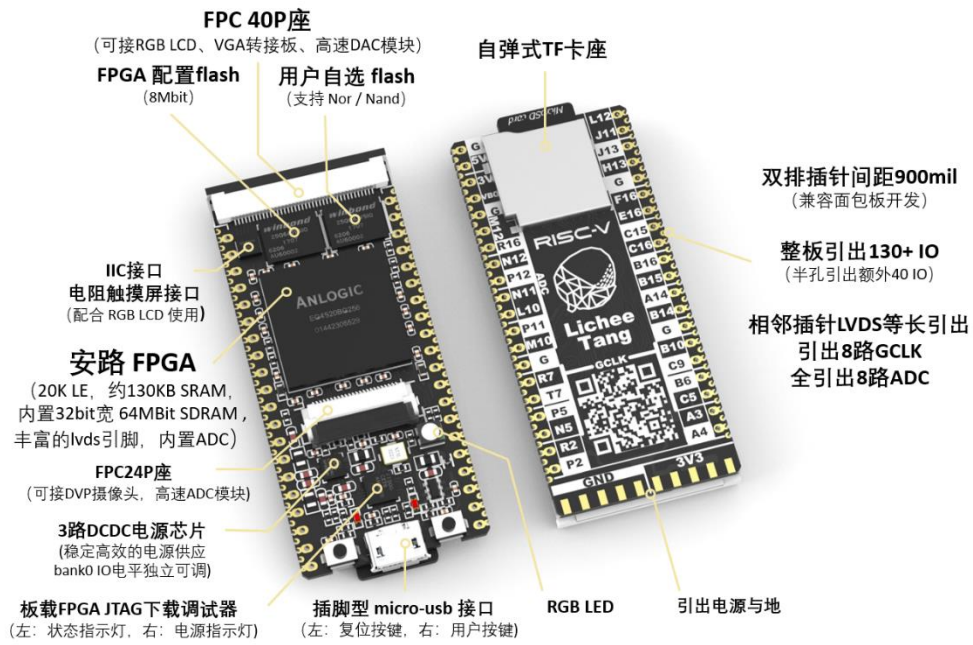
Support hummingbird risc-v soft core

https://github.com/Lichee-Pi/Tang_E203_Mini

Lichee Tang development board pin diagram



Lichee Tang Development Board Resource Map



Communicate communities and resources	
Github	https://github.com/Lichee-Pi
BBS	http://bbs.lichee.pro/t/lichee
Wiki	tang.lichee.pro
E-mail	support@sipeed.com

Size and weight	
Development board size	25.4x56.0mm
Development board weight	6.2±0.1g

Precautions	
RV debugging	When using the RV debugger, if you need to use USB power, try to use a shorter USB cable.
Micro-USB	The USB interface can be used for power supply, and the interface is fragile. Please pay attention to the use.
Download and debug	On-board FPGA JTAG download debugger, debugging hummingbird core requires other debuggers, such as RV, JLink
Operating temperature	-20~85℃
Power consumption and current	No-load current is about 50mA

Target application scenario:

- High-speed communication interface interconnection
- Learning, debugging, research of soft cores such as RISC-V
- Machine vision processing
- Parallel computing acceleration