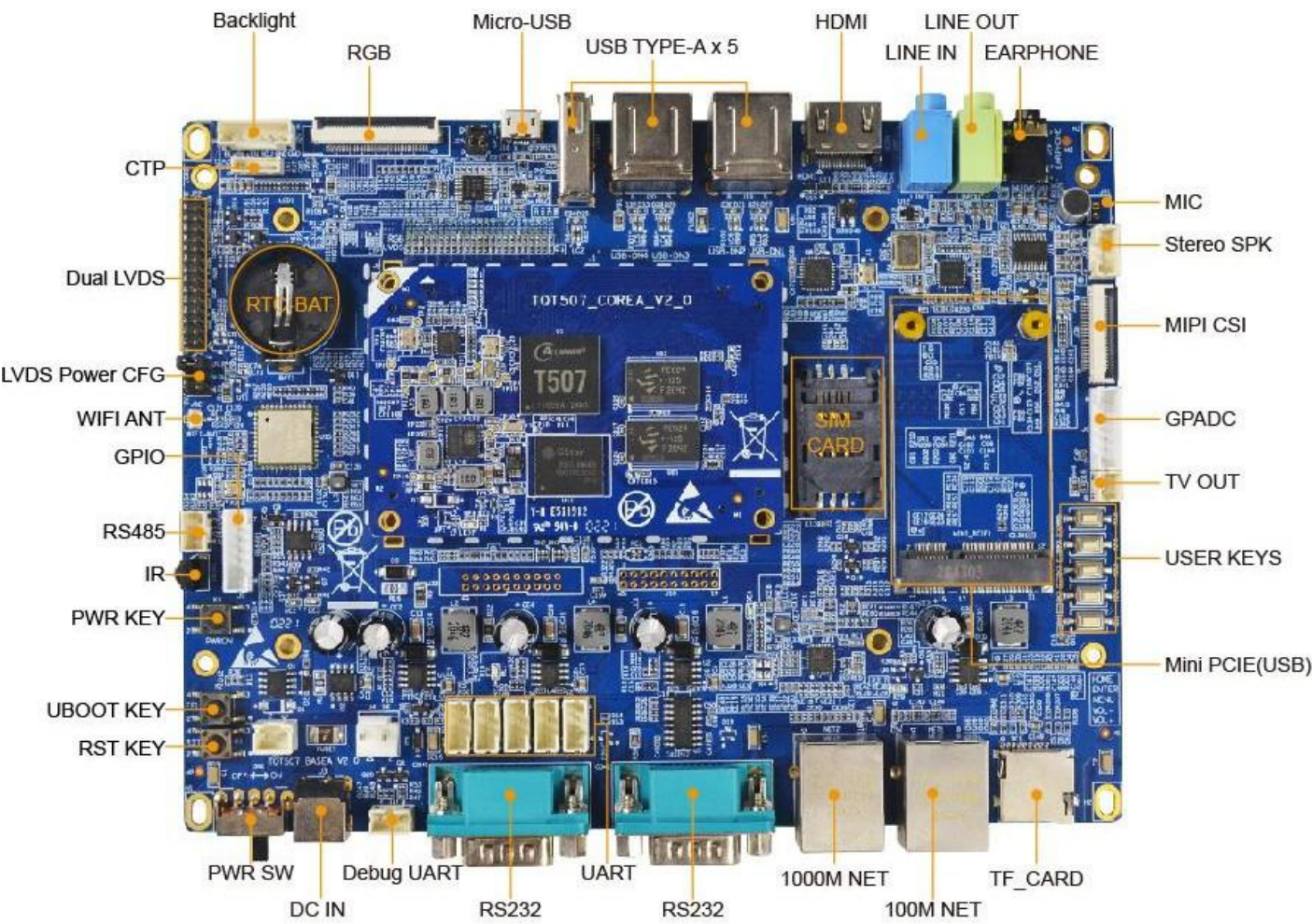


# 第一章 开发板的使用

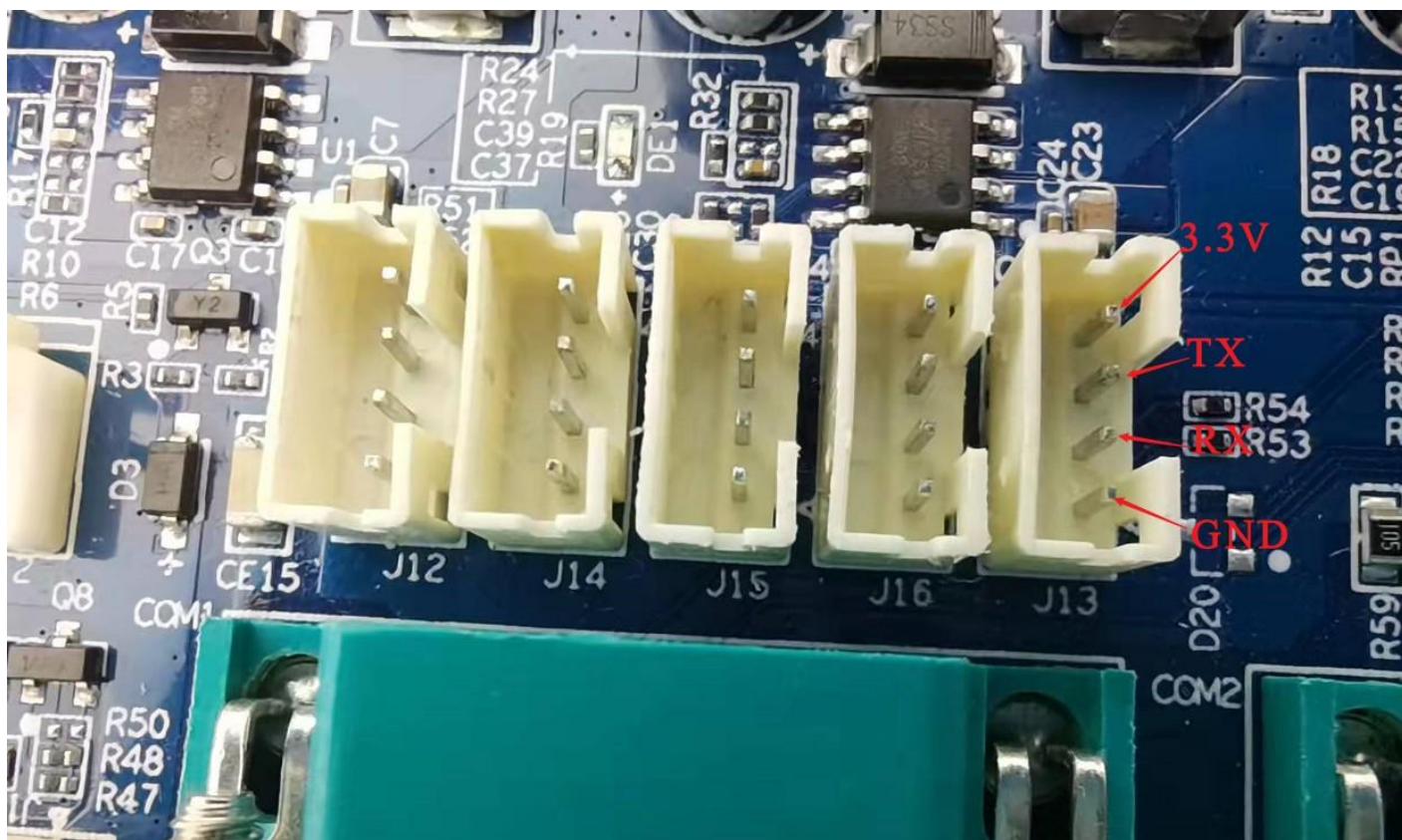
## 1.1 TQ507开发板介绍

详情见 “文档/TQT507 CoreA&BaseA开发板硬件手册.docx” 说明文档。

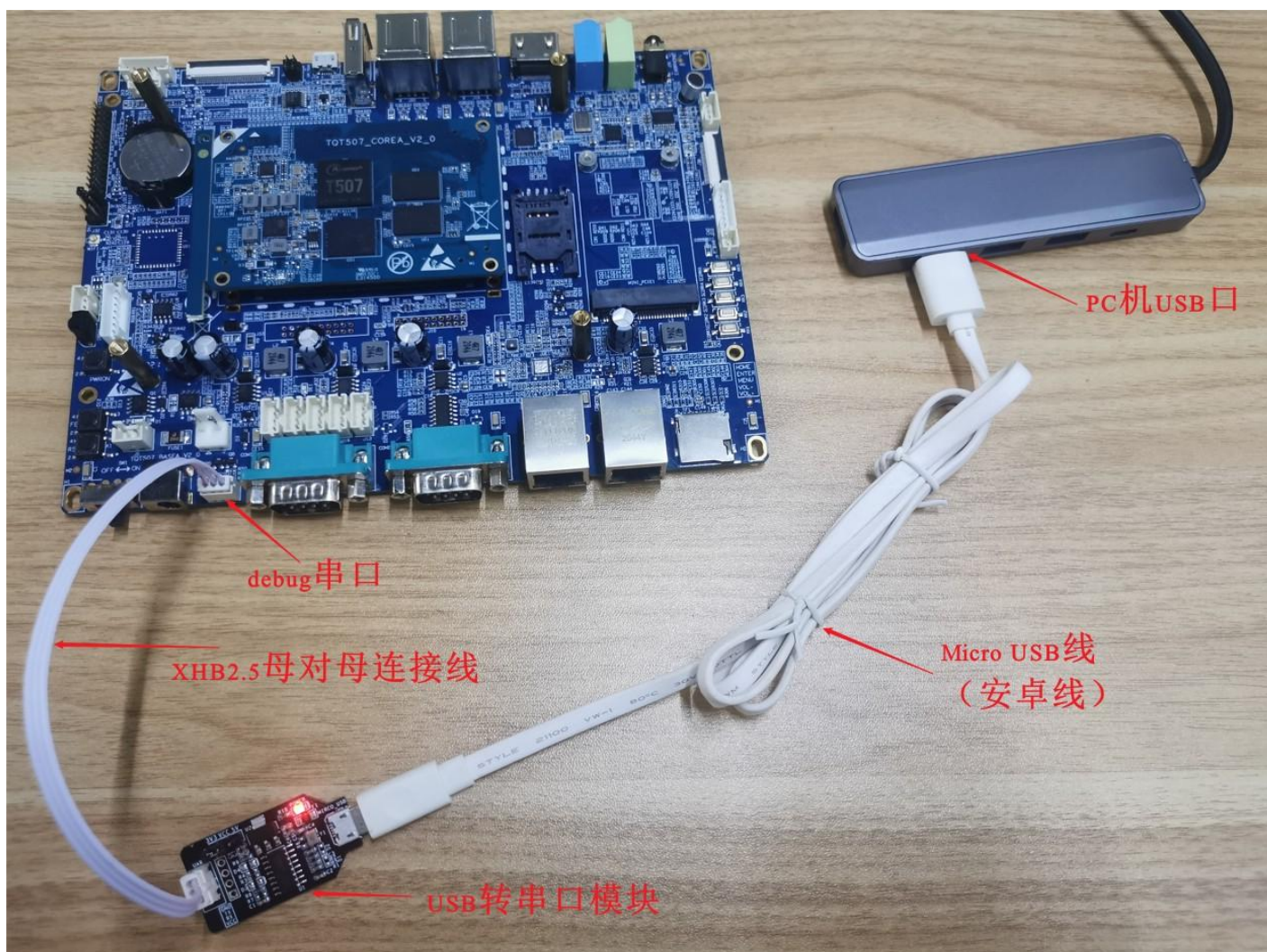
## 1.2 开发板底板接口说明





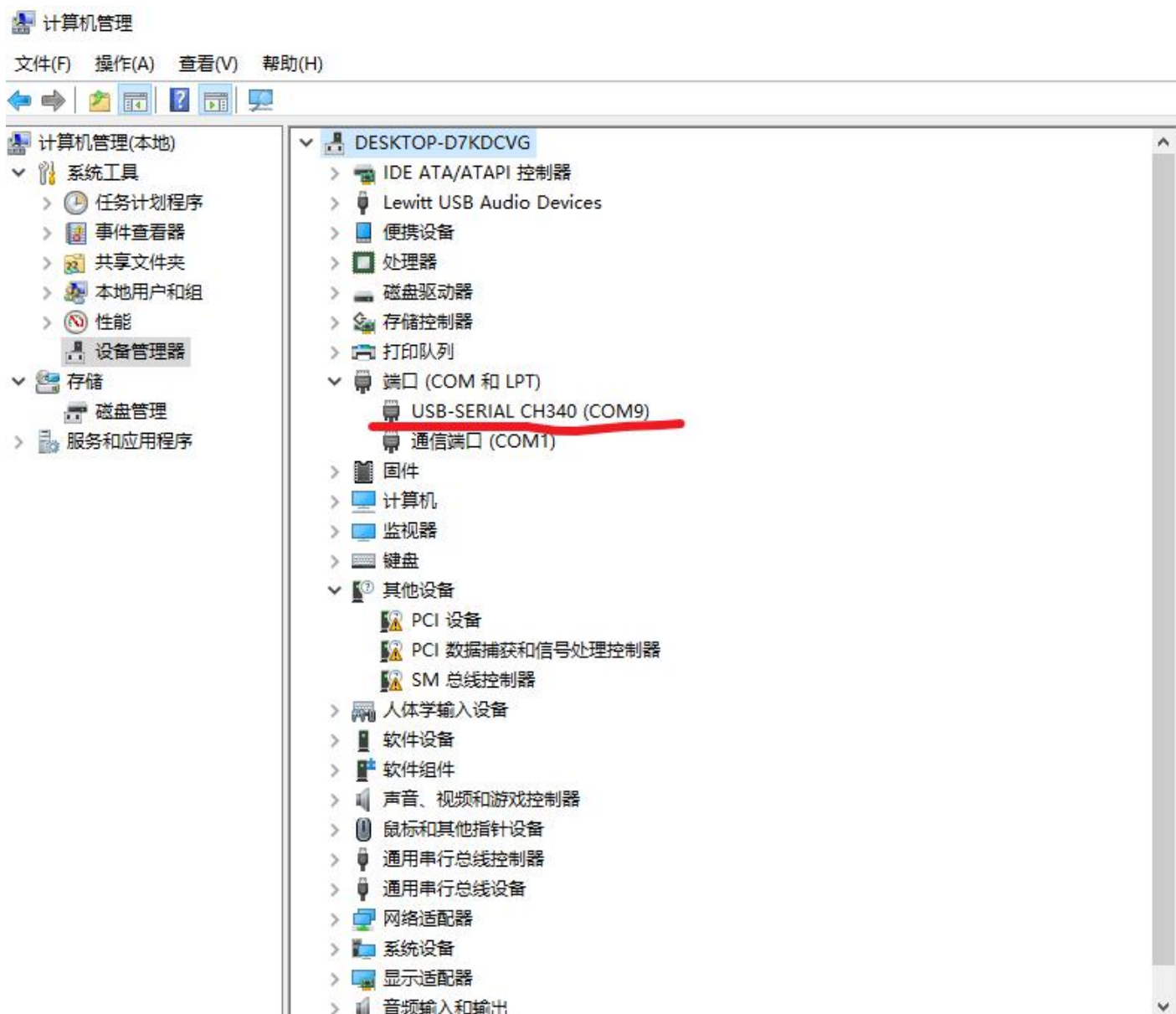


### 1.3 开发板与PC机的连接

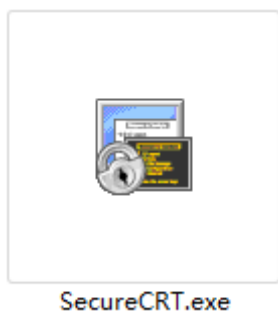


## 1.4 使用SecureCRT连接开发板

1、打开“设备管理器”查看“端口”选项下是否有"USB-SERIAL CH340"设备，如果没有请下载“360驱动大师”进行安装

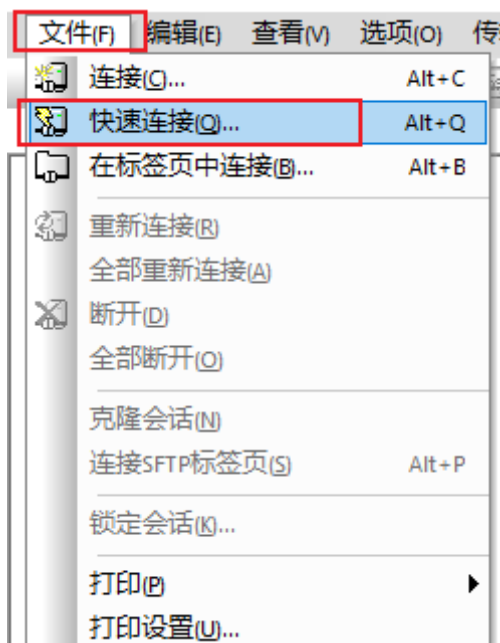


2、解压“工具/SecureCRT.rar”然后进入“SecureCRT/SecureCRT”目录，双击"SecureCRT.exe"文件

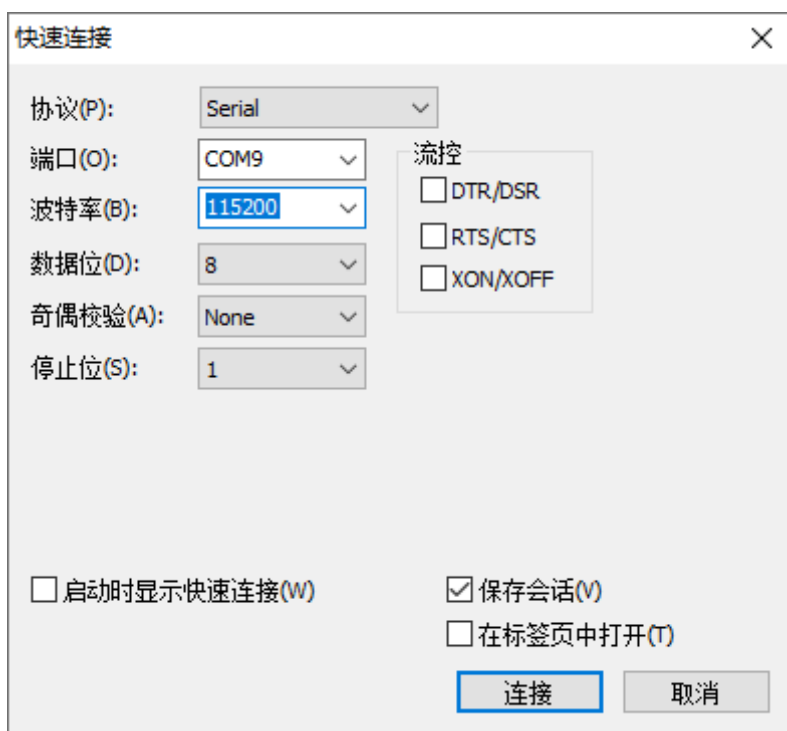


3、点击菜单中的“文件->快速连接”





4、协议选择“Serial”，端口选择设备管理器端口选项下的COM编号，波特率设置为115200，取消勾选流控选项下的“RTS/CTS”，然后点击“连接”按钮



5、给开发板上电，如果出现类似如下信息，则说明配置成功

```
Serial-COM9 (1) - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(I) 帮助(H)
Serial-COM9 (1)
0.000000 Inode-cache hash table entries: 131072 (order: 8, 1048576 bytes)
0.000000 Memory: 1962896K/2097152K available (12286K kernel code, 2132K rwddata, 4436K rodata, 4736K init, 565K bss, 68720K reserved, 65536K cma-reserved)
0.000000 Virtual kernel memory layout:
0.000000   modules : 0xffffffff80000000 - 0xffffffff8008000000 ( 128 MB)
0.000000   vmalloc : 0xffffffff8008000000 - 0xffffffff8008c00000 ( 250 GB)
0.000000   .text : 0xffffffff8008000000 - 0xffffffff8008c00000 (12288 KB)
0.000000   .rodata : 0xffffffff8008c00000 - 0xffffffff80090e0000 ( 4480 KB)
0.000000   .init : 0xffffffff80090e0000 - 0xffffffff8009580000 ( 4736 KB)
0.000000   .data : 0xffffffff8009580000 - 0xffffffff8009795008 ( 2133 KB)
0.000000   .bss : 0xffffffff8009795008 - 0xffffffff8009822640 ( 566 KB)
0.000000   fixed : 0xffffffffbefe7fb000 - 0xffffffffbefe000000 ( 4116 KB)
0.000000   PCI I/O : 0xffffffffbefe000000 - 0xffffffffbefe000000 ( 16 MB)
0.000000   vmemmap : 0xffffffffb000000000 - 0xffffffffc000000000 ( 4 GB maximum)
0.000000   memory : 0xffffffffb000000000 - 0xffffffffb020000000 ( 32 MB actual)
0.000000   SLUB: Hwalign=64, order=0-3, minobjects=0, CPUs=4, Nodes=1
0.000000 Preemptible hierarchical RCU implementation.
0.000000 Build-time adjustment of leaf fanout to 64.
0.000000 NR_IRQS:64 nr_irqs:64 0
0.000000 clocksource: timer: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns: 79635851949 ns
0.000000 arm_arch_timer: Architected cp15 timer(s) running at 24.00MHz (virt).
0.000000 clocksource: arch_sys_counter: mask: 0xffffffffffffff max_cycles: 0x588fe9dc0, max_idle_ns: 440795202592 ns
0.000004 sched_clock: 56 bits at 24MHz, resolution 41ns, wraps every 4398046511097ns
0.008103 Calibrating delay loop (skipped), value calculated using timer frequency.. 48.00 BogoMIPS (lpj=80000)
0.018198 pid_max: default: 32768 minimum: 301
0.023045 Security Framework initialized
0.026878 SELinux: Disabled at boot.
0.030816 Mount-cache hash table entries: 4096 (order: 3, 32768 bytes)
0.037364 Mountpoint-cache hash table entries: 4096 (order: 3, 32768 bytes)
0.045211 ftrace: allocating 38138 entries in 149 pages
0.137524 sched-energy: CPU device node has no sched-energy-costs
0.137592 Invalid sched_group_energy for CPU0
0.137633 CPU0: update cpu_capacity 1024
0.147046 ASID allocator initialised with 32768 entries
0.165773 BOOTEVENT: 165.757790: ON
0.194029 Detected VIPT I-cache on CPU1
0.194082 Invalid sched_group_energy for CPU1
0.194086 CPU1: update cpu_capacity 1024
0.194089 CPU1: Booted secondary processor [410fd034]
0.217429 Detected VIPT I-cache on CPU2
0.217470 Invalid sched_group_energy for CPU2
0.217473 CPU2: update cpu_capacity 1024
0.217476 CPU2: Booted secondary processor [410fd034]
0.240847 Detected VIPT I-cache on CPU3
0.240885 Invalid sched_group_energy for CPU3
0.240889 CPU3: update cpu_capacity 1024
0.240891 CPU3: Booted secondary processor [410fd034]
0.240990 Brought up 4 CPUs
0.274986 SMP: Total of 4 processors activated.
0.279678 CPU features: detected feature: 32-bit EL0 support
0.285483 CPU features: detected feature: Kernel page table isolation (KPTI)
0.296398 CPU: All CPU(s) started at EL1
0.296734 alternatives: patching kernel code
0.301367 Invalid sched_group_energy for CPU3
0.305681 CPU3: update max cpu_capacity 1024
0.310096 Invalid sched_group_energy for Cluster3
```

## 6、开发板启动成功后出现如下提示信息

```
install_listener( tcp_port , smart_socket [ 47.346623] read descriptors
[ 47.346623] read strings
[ 50.371976]
[ 50.371976] insmod_device_driver
[ 50.371976]
device_chose finished!
Error:Input device can not be found,plz check it! set mouse0 default
cat: can't open '/tmp/dbusaddr': No such file or directory
find qt5 installed done
killall: mainwindow: no process killed
root@/ #
```

## 7、注意：如果提示信息为乱码则可能波特率设置错误，请检查波特率是否设置为115200

```
Serial-COM9 (2) - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(I) 帮助(H)
Serial-COM9 (2)
Sn#nn#FF#1#y#C吨jHsk#f)CH(f1aTv05款 f j#koTfD@e!)!
      铺茹漓雾LLN )端01哒
      1端0!妩(岸)鯨鯨090(000~0!
      磁尻 !!!(
      .)弄鋒N迦弄#N(N
      晒H驚JH#
      燈1霍滿
```