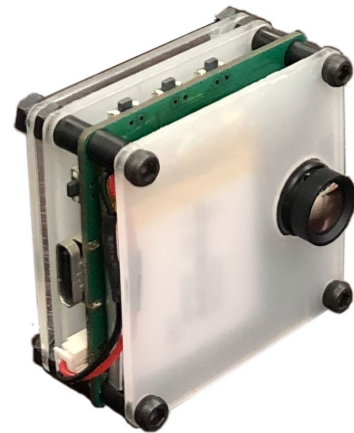
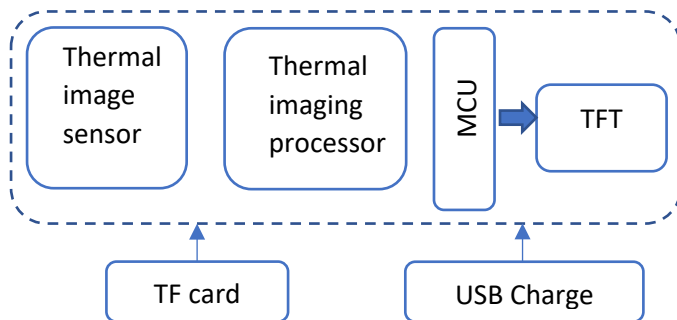


### General Description

The CTC01 thermal camera module has been special designed for hand held application. It integrates a thermal sensor array and image processor to display temperature color mapping on a square TFT.



### System Diagram

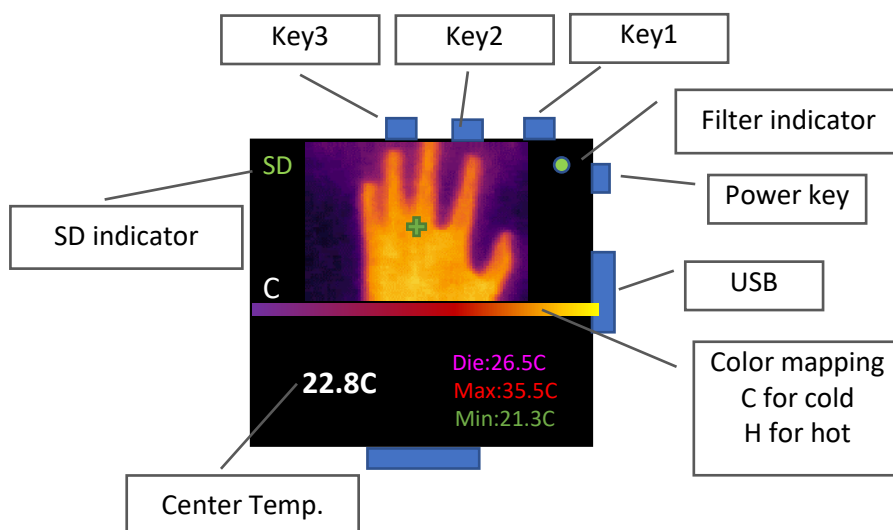


### Features

- ✓ Thermal sensor in 80x62 pixel
- ✓ Different mode for pixel temperature color mapping
- ✓ Display size 240x240
- ✓ 4-Key functions
- ✓ Small in size
- ✓ 4.2V battery operation
- ✓ Built in battery charger
- ✓ Save image to TF card

### Key Description

Key	Description
Key1	snapshot
Key2	Change color mapping
Key3	Set filter on/off
Key power	Power on/off module



## Operations

1. Press and hold the power key for 2 seconds to power on the module. When it is powered on, press and hold the same key for 2 seconds to turn it off.
2. Press Key1 to take a picture and save it to the TF card in BMP format. Ensure that the TF card is inserted before the snapshot is taken.
3. Press Key2 to change color mapping.
4. Press Key3 to turn on/off the filter. By default, the filter is enabled. The top right dot turns green when it is enabled, and red when it is disabled.
5. The module does not support card hot-plugging. Whenever the TF card is inserted, the module will reboot automatically.

## LED status

D2

1. Flashing in 1Hz: charging
2. OFF: no external power
3. ON: fully charged

D3

1. Flashing in 1Hz: low battery
2. ON: discharge

## Thermal imaging sensor characteristics

Parameter	Value	Unit
Wavelength range	8 - 14	um
Array format	80H x 62V	pixel
Scene temp range	-20 ~400	degC
Operation temp range	-20 ~85	degC
Frame rate	5	fps

## Electrical Specification

Symbol	Parameter	Condition	Min	Typ	Max	Unit
VDD	DC supply voltage		3.5	4.2	5.0	V
I <sub>o</sub>	Operation Current	Operating		200		mA
I <sub>stb</sub>	Standby Current			70		uA

## Mechanical dimension

