

Thermal Imaging Core

General information about ADTC-7023TC

Thermal Imaging Core:

ADTC-7023TC delivers a revolutionary generation thermal image core without shutter in the market. It is ultra light weight, tiny size, super low power consumption, less technology, ideal core for variety of integration applications. Thermal imaging core ADTC-7023TC is available as lens-less, or without cover, or with IR lenses option. It is convenient to be fixed directly in existed CCTV systems with M4. And it is also easily integrated hundreds of thousands of applications including automotive night vision systems, firefighting equipments, medical instruments, handheld cameras, unmanned vehicles, security & surveillance, and more.

Main Features:

- ✓ Shutterless technology, continuous thermal video
- ✓ Ultra low power consumption (< 0.65W)
- ✓ Tiny size 42x41x23mm (without cover)
- ✓ Super light weight (< 30g)
- ✓ No-interruption operatio
- ✓ Time to image < 3s
- ✓ 25-micron pixel pitch, NETD < 65mK
- ✓ Auto/manual cycle adjustment
- ✓ 2x, 4x digital zoom enables users to see objects details
- ✓ Athermal & manual lens are available



Technical specification of the device:

Detector Data

- Detector type:Uncooled FPA
- IR resolution:384×288
- Pixel pitch:25um
- Thermal sensitivity(NETD):<65mk@f/1.0
- Frequency:50Hz

Image Performance

- Analog video output:PAL(768*576)/NTSC(optional)
- Digital video output:CMOS(14Bit)
- Image enhancement:Yes
- Brightness/Contrast:Auto/Manual
- Polarity/LUT:Black hot/White hot
- Electronic zoom:2x, 4x
- Invert/Revert:Yes
- Image frozen:Yes
- Pseudo-color enhancement:Black hot/White hot or 5 color pallete
- Image correction:Auto/Manual
- Time to image:<3s
- Cross cursor:Yes,moveable
- Text comment :Text overlay
- Online upgrading:No

Physical Data

- Size (w/o lens):42.0×41.0×23(L×H×W)
- Weight (w/o lens & rear cover):<30g
- Mounting:M4, 1/4"-20



Environment Data

- Operating temperature range:-40°C~60°C
- Storage temperature range:-50°C~70°C
- Vibration:4.3g 3axes, 8hours each
- Shock:200g;11msec shock pulse (all axes)
- Humidity:40°C/95%RH, Non-condensing
- Temperature-shock:5°C/min(-40°C~+60°C)
- Electromagnetic Radiation Standard
- Interfacing:Expansion board
- Primary Electrical Connector:40 PIN
- External power interface:2.2~5.5V
- Power consumption:< 0.65W
- Control port:RS232/RS485/RS422(optional)
- Digital video output:LVDS/CMOS(14Bit)/BT656(8Bit)/USB2.0/Camera Link
- Analog video output:BNC(75Ω);Support dual RS170 CCIR/PAL Composite
- Video
- Keypad:4 button keyboard(optional)

