

Moka series

Performance:

Type	Moka-C10	Moka-C20	Moka-C40	Moka-C51	Moka-C50	Moka-M10
Chip	Bt878	SAA7130	BT878	SAA7146	SAA7146	SAA7146
Bus	PC104Plus	PC104Plus	PC104Plus	PC104Plus	PC104Plus	PC104Plus
Format supported	PAL NTSC SECAM	PAL NTSC SECAM	PAL NTSC SECAM	PAL NTSC SECAM	PAL NTSC SECAM	PAL NTSC SECAM
Video input	4composite, or 1S-video	4composite, or 1S-video	4composite, RGB	4composite, YcrCb,	8composite	6 composite or 1S-video
Monochrome /Color	Monochrome Color	Monochrome Color	Monochrome Color	Monochrome	Monochrome Color	Monochrome Color
Scaling	Support	Support	Support	Support	Support	Support
Cutting	Support	Support	Support	Support	Support	Support
Maximal capture resolution	PAL (768×576) NTSC(640 × 480)	PAL (768×576) ① NTSC(640 × 480)	PAL (768×576) NTSC(640 × 480)	PAL (768×576) NTSC(640 × 480)	PAL (768×576) NTSC(640 × 480)	PAL (768×576) ① NTSC(640 × 480)
Format captured	Y8/RGB15 /RGB16/RGB24 /RGB32/YUV4 22/YUV411	Y8/RGB15 /RGB16/RGB24 /RGB32/YUV4 22/YUV411	Y8/RGB15 /RGB16/RGB24 /RGB32/YUV4 22/YUV411	Y8 or 10 Bit	Y8/RGB15 /RGB16/RGB24 /RGB32/YUV4 22/YUV411	Y8/RGB15 /RGB16/RGB24 RGB32/YUV422/ YUV411
Horizontal mirror image	No support	Support	No support	Support	Support	Support
Vertical mirror image	Support	Support	Support	Support	Support	Support
Control function	No	3 TTL input, 4 TTL output and 1 MOS input	4 TTL I/O	2 TTL I/O	2 TTL I/O	1 TTL input/ output, 1 differential input /output

	Moka-C10	Moka-C20	Moka-C40	Moka-C50	Moka-C51	Moka-M10
Hardware compression	No support	No support	No support	No support	No support	Support (MPEG-1)
Audio acquisition	Support	No support	Support	No support	No support	Support
VFW interface	Support	Support	Support	Support	Support	No support
DOS	Support	Support	No support	Support	Support	No support
WDM driver	Yes	Yes	Yes	Yes	Yes	Yes
WINNT4	Support	Support	Support	Support	Support	No support
Several boards	Support	Support	Support	Support	Support	Support
The version of software	V5.0	V5.0	V1.1	V5.0	V5.0	V1.3

Moka-C10

(1) Introduction:

Moka-C10 is a frame grabber for color or monochrome video acquisition based on PC104 PLUS bus. It supports 4 CVBS inputs and 1 S-video input. It can receive standard video signals stably from various video sources. Its resolution can reach 768×576 . Meanwhile it can capture 1 stereo input.

(2) Performance:

- 8Bit A/D converter
- Real-time acquisition of color or monochrome video signals
- 4 CVBS inputs or 1 S-Video input, can be switched rapidly (about 80ms)
- 1 stereo input
- Video input: PAL, NTSC and so on
- Brightness, contrast, hue and saturation can be adjusted by software respectively.
- Many kinds of add-ons, which can be used to edit image, such as horizontal and vertical scaling and opening a window.
- Character and graphics overlay by software
- Inputted image scaling by hardware
- Resolution up to 768×576 (PAL), 640×480 (NTSC)
- Hardware finishes the top/bottom mirror image reversion
- RGB32, RGB24, RGB16, RGB15, RGB8, YUV422, I 420, monochrome GRAY8 and so on.
- Capture single field, single frame, interval frame and successive frame

- Definition: 450lines (horizontal)
350lines (vertical)

- Power consumption up to 0.2W

(3) Software:

Platform support: Dos, Win9x, Win2000, WinXP, Win2003 and Linux

Re-development support: VC/VB/Delphi, VFW, Twain, Dshow and Mil

(4) Application

Industrial inspection: pipeline inspection (cotton knot inspection, vehicle's headlight inspection)

Intelligent traffic: digital moving police aboard vehicle, vehicle capture that get out of line, road monitor, license plate reading, the management of toll station and park, and so on

Military research: sailing picture

Robot vision

Security surveillance

Biometrics

Moka-C20

(1) Introduction:

Moka-C20 is a frame grabber for color or monochrome video acquisition based on PC104 PLUS bus. It supports 4 CVBS inputs and 1 S-Video input. It can receive standard video signals stably from various video sources. Its resolution can reach 768×576 .

(2) Performance:

- 9Bit A/D converter
- Real-time acquisition of color video signals
- 4 CVBS inputs or 1 S-Video input, can be switched rapidly (about 80ms)
- Video input: PAL, NTSC and so on
- Brightness, contrast, hue, saturation and image size and proportion can be adjusted by software
- Many kinds of add-ons that can be used to edit image, such as horizontal and vertical scaling and opening a window.
- Character and graphics overlay by software
- Hardware finish the left/right and top/bottom mirror image reversion
- Hardware scales the inputted images (no less than 32×32)
- Resolution up to 768×576 (PAL), 640×480 (NTSC)
- RGB32, RGB24, RGB16, RGB15, RGB8, YUV422, monochrome GRAY8 and so on.
- Capture single field, single frame, interval frame and successive frame
- Supply the control interface: 3 TTL inputs (can be connected with external trigger); 4 TTL outputs (can be connected with the control after alarming)
- Definition: 450lines (horizontal)
450lines (vertical)
- Power consumption up to 0.3W

(3) Software

Platform support: Dos, Win9x, Win2000, WinXP, Win2003 and Linux

Re-development support: VC/VB/Delphi, VFW, Twain, Dshow and Mil

(4) Application:

Industrial inspection: pipeline inspection (cotton knot inspection, vehicle's headlight inspection)

Intelligent traffic: digital moving police aboard vehicle, vehicle capture that get out of line, road monitor, license plate reading, the management of toll station and park, and so on

Military research: sailing picture

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Moka-C40

(1) Introduction:

Moka-C40 is a professional and high-quality picture frame grabber for real-time acquisition from 4 channels, based on PC104 PLUS bus. It supports 4 CVBS inputs and real-time capture and display. Single board supports real-time acquisition and display from 4 channels, each of which features $768 \times 288 \times 24\text{Bit} \times 25\text{f/s}$, having requirements to the performance of display card in system, but not occupying CPU. It supports several boards' integration in a computer. Moka-C40 has the features of high price/performance ratio, good compatibility and stability.

(2) Performance:

- 8Bit A/D converter
- Real-time acquisition of color video signals
- 4 standard video inputs
- 4 simultaneous acquisition featuring $768 \times 288 \times 24\text{Bit} \times 25\text{f/s}$
- Real-time acquisition and display from 4 channels, simultaneous and real-time preview of several channels (several boards), and 4 single track inputs
- Video input: PAL, NTSC and so on
- Brightness, contrast, hue, saturation and image size and proportion can be adjusted by software
- Many kinds of add-ons that can be used to edit image, such as horizontal and vertical scaling and opening a window.
- Character and graphics overlay by software
- Inputted image scaling by hardware
- Hardware finishes the top/bottom mirror image reversion
- Acquisition and display resolution up to 768×576 (PAL), 640×480 (NTSC)
- RGB32, RGB24, RGB16, RGB15, RGB8, YUV422, I 420, monochrome GRAY8 and so on.
- The control matching with flashlight, and the function of capturing images on the condition of short-time exposure
- Expanding function:
 - ① Supply the control interface: 4 TTL inputs (can be connected with external trigger); 4 TTL outputs (can be connected with the control after alarming)
 - ② The frame grabber can supply Watchdog function. If you need this function, please tell our sellers before you purchase it. We will supply the frame grabber with Watchdog function to you.
- Definition: 450lines (horizontal)

350lines (vertical)

- Power consumption up to 6.2W

(3) Software

Platform support: Win9x, Win2000, WinXP, Win2003 and Linux

Re-development support: VC/VB/Delphi, VFW, Twain and Mil

(4) Application

Industrial inspection: pipeline inspection (cotton knot inspection, vehicle's headlight inspection)

Intelligent traffic: digital moving police aboard vehicle, vehicle capture that get out of line, road monitor, license plate reading, the management of toll station and park, and so on

Military research: sailing picture

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Moka-C50/C51

(1) Introduction

Moka-C50 is a high-precision and 10Bit A/D frame grabber for color video acquisition, based on PC104 PLUS bus. It supports 8 CVBS inputs, 1 S-Video input, a group of RGB signals and a group of YPrPb signals inputs, and 1 CVBS output. It has the function of character and graphic overlay by hardware and software. This is a high-definition frame grabber with perfect function and good compatibility.

Moka-C51 is a high-precision and 10Bit A/D frame grabber for monochrome video acquisition, based on PC104 PLUS bus. It realizes 10Bit bus transfers, storage and processing. It supports 3 CVBS inputs and 1 CVBS output. It has the function of character and graphic overlay by hardware and software. This is a high-definition frame grabber for monochrome video acquisition with perfect function and good compatibility.

(2) Performance

- 10Bit A/D converter
- Moka-C50 features 8 standard CVBS inputs, 1 S-Video input, 1 RGB and 1 YPrPb input; can choose one channel to output from 8 CVBS inputs
- Moka-C51 features 3 standard CVBS inputs; can choose one channel to output from 3 CVBS inputs.
- Video input: PAL, NTSC and so on
- Comb filter and anti-aliasing filter
- Moka-C50: brightness, contrast, chrome, hue and saturation can be adjusted by software.
Moka-C51: brightness and contrast can be adjusted by software.
- Hardware scales or cuts the inputted images.
- Hardware finish the left/right and top/bottom mirror image reversion
- Character and graphic overlay by software or hardware
- Acquisition and display resolution up to 768×576 (PAL), 640×480 (NTSC)
- Moka-C50: 8Bit, RGB15, RGB16, RGB24, RGB32, YUV422, YUV411 and so on
Moka-C51: 8Bit, 10Bit

- Supply the control interface: 2 TTL or 1 TTL and 1 optical insulated input control (can be connected with external trigger), 2 TTL outputs (can be connected with the control after alarming)
- Capture single field, single frame, interval frame and successive frame
- Definition of Moka-C50: 500lines (horizontal)
500lines (vertical)
- Definition of Moka-C51: 600lines (horizontal)
600lines (vertical)
- Power consumption up to 3.6W

(3) Software

Platform support: Dos, Win9x, Win2000, WinXP, Win2003 and Linux

Re-development support: VC/VB/Delphi, VFW, Twain and Mil

(4) Application

Industrial inspection: pipeline inspection (cotton knot inspection, vehicle's headlight inspection)

Intelligent traffic: digital moving police aboard vehicle, vehicle capture that get out of line, road monitor, license plate reading, the management of toll station and park, and so on

Military research: sailing picture

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Moka-M10

(1) Introduction

Moka-M10 features vivid image, perfect function and good compatibility, which is based on PC104PLUS, with the function of compressing record. It supports video stream and audio-visual composite stream. The speed of video and audio code stream can be adjusted. It can be applied to surveillance and image processing in the field of biomedicine, military affairs and public security.

(2) Performance

- 9Bit A/D converter
- Real-time acquisition of color video signals
- 4 CVBS inputs and 1 S-Video input (choose one channel to input), can be switched (about 80ms)
- Video input: PAL, NTSC and so on
- Brightness, contrast, hue, saturation, image size and proportion can be adjusted by software
- Many kinds of add-ons that can be used to edit image, such as horizontal and vertical scaling and opening a window.
- Real-time left/right and top/bottom mirror image reservation
- Overlay function: by filling in the mask modules, can real-time display and store the input images with and kind of shape.
- Display resolution up to 768×576
- Capture resolution up to 720×576
- RGB32, RGB24, RGB16, RGB15, RGB8, YUV422, I 420, monochrome GRAY8 and so on.
- Video code stream can be adjusted when MPEG-1 recording:

CIF (352×288) 256kBit/s—4096kBit/s

QCIF (176×144) 64kBit/s—2048kBit/s

- Audio code stream can be adjusted when MPEG-1 recording: 32kBit/s—384kBit/s
- Power consumption: the maximal operating current is 300mA, and power is not more than 1W.
- The content of computers and image captured can be display in the same screen.
- Capture single field, single frame, successive field, successive frame and interval image
- Expanding function: The frame grabber can supply Watchdog function. If you need this function, please tell our sellers before you purchase it. We will supply the frame grabber with Watchdog function to you.
- Definition: 500lines (horizontal)
450lines (vertical)
- Power consumption up to 0.5W

(3) Software

Platform support: Win9x, Win2000, WinXP, Win2003 and Linux

Re-development support: VC/VB/Delphi and Mil

(4) Application

Industrial inspection: pipeline inspection (cotton knot inspection, vehicle's headlight inspection)

Intelligent traffic: digital moving police aboard vehicle, vehicle capture that get out of line, road monitor, license plate reading, the management of toll station and park, and so on

Military research: sailing picture

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