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Training Course

Casio DT-X30GR-30C Camera

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Function: *Product Support*
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What to Expect

- **Basic Specifications**
- **Digital Camera Utility**
- **Registry Settings**
- **Software Development**
- **Operation Process**
- **Emulator**
- **Workshop**

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Basic Specifications

Device	CMOS color camera
File Format	BMP (24 bit), JPEG (YUV422, RGB888)
File Compression	JPEG, 4 levels
Resolution	~ 2,000,000 pixels (UXGA: 1200 x 1600)
Digital Zoom	x 1.5 – x 3.0
Focus	10 levels + auto focus
Aperture	2.9
Focal distance	F = 3.45 mm
Brightness	24 levels
Flash LED	0 – 100%; 21,000 mcd
White Balance	2850K – 6500K
Preview	15 fps

Image Resolutions

Size	Resolution	Image	Preview	Rotation
UXGA	1200 x 1600	Yes	No	Yes
QUAD-VGA	960 x 1280	Yes	No	Yes
XGA	768 x 1024	Yes	No	Yes
SVGA	600 x 800	Yes	No	Yes
VGA	480 x 640	Yes	No	Yes
1/4VGA	240 x 320	Yes	Yes	Yes
1/9VGA	160 x 213	No	Yes	Yes

Digital Zoom



Always remember the dependency between magnification and resolution:

	1/4VGA	VGA	SVGA	XGA	QUAD-VGA	UXGA
x 1.5	Yes	Yes	Yes	Yes	No	No
x 2.0	Yes	Yes	Yes	No	No	No
x 3.0	Yes	No	No	No	No	No

WYSIWYG: Do not forget to synchronize digital zoom for preview and image output.

Digital Camera Utility (1/2)

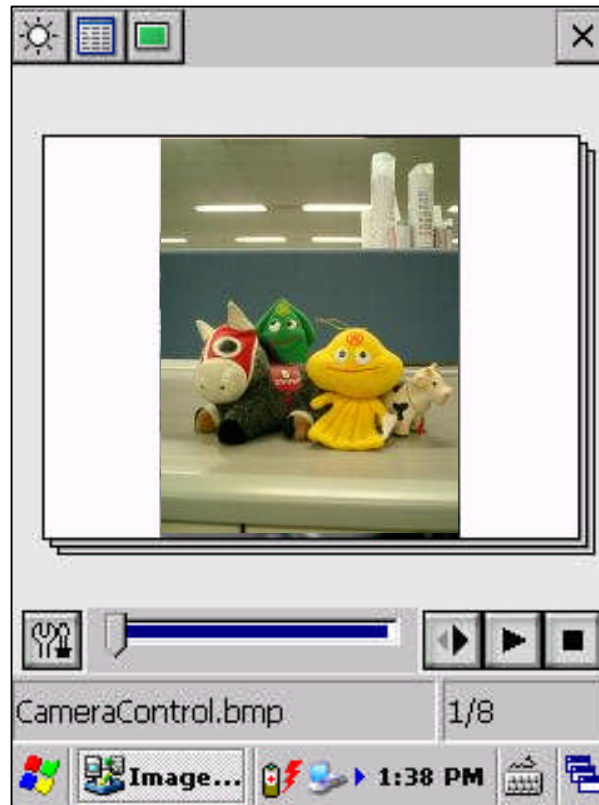
The screenshot shows a software window titled "My Documents" with a camera viewfinder. The viewfinder displays a scene with several colorful puppets on a table. The interface includes various control panels and a status bar. Labels with arrows point to specific features:

- Screen Brightness**: Points to the sun icon in the top-left corner.
- Digital Flash**: Points to the flash icon in the top-left corner.
- GPS Data**: Points to the crosshair icon in the top-left corner.
- Exposure**: Points to the exposure control panel on the left side.
- White Balance**: Points to the white balance control panel on the left side.
- List View**: Points to the list view icon in the top-left corner.
- Image Size**: Points to the "UQA" resolution selection button on the right side.
- Image Quality**: Points to the "NORM" quality selection button on the right side.
- Digital Zoom**: Points to the "x1.5" zoom selection button on the right side.
- Focus**: Points to the "SHUT TER" button on the right side.
- Sample at Start, Programs, Image Tool, Mobile Camera**: Points to the top-right corner of the window.

Ready to capture image.

Mobil... 1:37 PM

Digital Camera Utility (2/2)



From list view, you can display a selected image in full size or start a slide show.

← Slide Show Window

← Playback Controls

Setup →

Registry Settings

HKLM\Drivers\CASIO\Camera\CamMw

Value : type	Description
ShutterSound : REG_SZ	Specify path to WAV file. Default is \Windows\Shutter01.wav.
ShutterVolume : REG_DWORD	Specify the volume in the range from 0 to 100. Default is 63.



Please, note: Any changes become valid only after soft reset operation.

Software Development

C / C++	VB / C#
CameraLib.h CameraLib.lib	CameraLibNet.dll (namespace Calib) Casio Camera Control (based on CameraLibNet.dll)



Please, do not forget to install `en_MoDev.ARMV4I.cab` to your mobile device.



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DT-X30 Function List

CAMOpen

CAMClose

CAMStartPreview

CAMStopPreview

CAMSingleCapture

CAMSingleCaptureEx

CAMSetImageSettings

CAMGetImageSettings

CAMSetLightMode

CAMGetLightMode

CAMSetDigitalZoom

CAMGetDigitalZoom

CAMSetSensitivity

CAMGetSensitivity

CAMilluminationOn

CAMSetIllumination

CAMGetIllumination

CAMSetFlickerless

CAMGetFlickerless

CAMSetDigitalFlashMode

CAMGetDigitalFlashMode

CAMSetFlash

CAMGetFlash

CAMSetFocus

CAMGetFocus

CAMGetFocusStatus

CAMAutoFocus

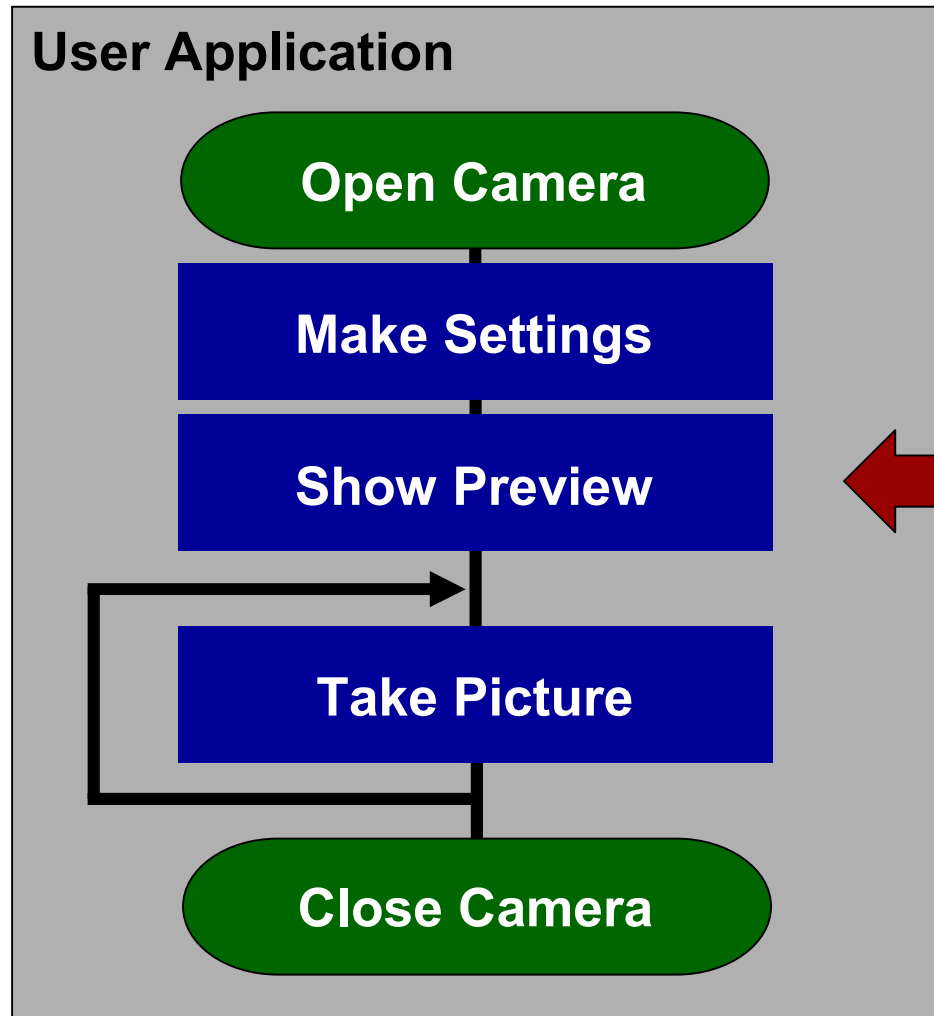
CAMSetPreviewMode

CAMGetPreviewMode

Remarks

CAMSingleCapture	Synchronous operation; use background thread to improve performance.
CAMSingleCaptureEx	Synchronous operation; disables the preview.
CAMilluminationOn (disabled by default)	Set SecretFunction : REG_DWORD to 1 at HKLM\Drivers\CASIO\Camera\CamLib and perform soft reset operation.
CAMSetFlash	Use CAMilluminationOn instad, otherwise the picture will be overexposed.
CAMGetFocus	Use CAMGetFocusStatus instead
CAMAutoFocus	Synchronous operation; call CAMSetPreviewMode to draw a focus frame in the preview window

Operation Process

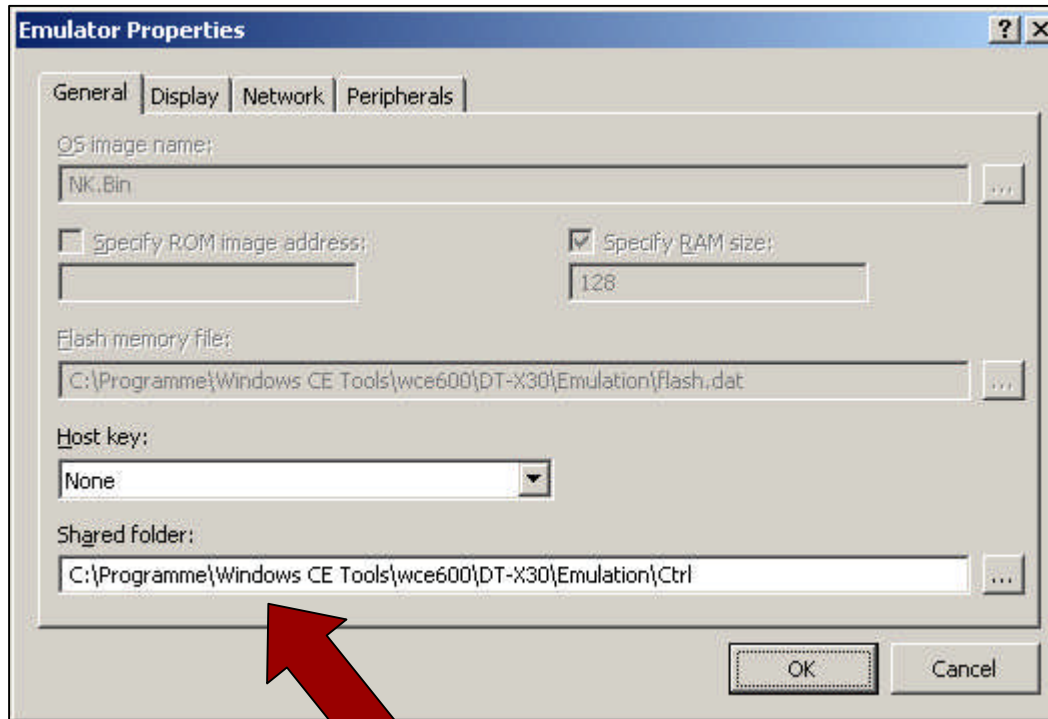


Without preview, you cannot call functions like `CAMSingleCapture` or `CAMAutoFocus`

necessary

Camera, Scanner, or Imager cannot be used concurrently.

Emulator Settings



For input and output, the emulator uses the image files specified in `\Camera\CameraLib.ini` in the shared folder.



C:\<Program Files>\Windows CE Tools\wce600\DT-X30\Emulation\Ctrl

Workshop

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Questions & Answers

