

Movidius MA1102

The Best Mobile Rich Media Imaging Experience

Product Description

The Movidius MA1102 enables mobile device designers to provide a unique rich media experience (photo & video - capture, edit, view and share) for social networking users on Android devices.

Sub-optimal camera optics, sensors, ISO sensitivity and the 'Megapixel Myth' have left users frustrated with their multimedia experience. The limitations of today's mobile platforms ensure these problems cannot be overcome with a software solution. The MA1102 compensates for these deficiencies to bring a truly unique experience.

Best Capture

- WVGA 30fps video and up to 12 MP still image
- 120 fps mode for fast action capture
- Real-time still image and video stabilization
- Real-time still image and multi-frame video zoom
- Enhanced low light performance noise reduction

Best Edit

- Real-time still image and video editor
- Quality improvements: stabilize, zoom, enhance
- Effects: Join clips, transitions, slow motion, color effects, etc

Best View

- Best quality upscaling of low resolution content
- Best quality downscaling of high resolution content
- Active LCD backlight control for longest play time
- Upscaling to HD for export to projector or external display

Best Share

- Single click photo and video sharing
- Automatic high quality downscaling for bandwidth management
- Smaller File Sizes by removing Shake
- No need for a PC

Applications

- Mobile Phones: Featurephones and Smartphones

Benefits

WVGA Camcorder

WVGA camcorder capture is achieved with the MA1102 H.264 video encoder. The MA1102's video algorithms compensate for low light conditions, shaky video, poor color tones and white balance. High resolution content can also be downscaled for high quality playback on WVGA, VGA, QVGA displays.

HD Playback: The best all round HD experience

HD 720p video playback is supported by downscaling to local display resolutions or sent to local HDMI driver chips for TV Out. Lower resolution content is enhanced by employing quality upscaling algorithms which maintain the integrity of the original video. De-noising, anti-aliasing and de-flickering techniques enrich distorted content to a higher quality.

Video Effects Suite: High Definition Creativity

The MA1102 enhances the user's user-generated-videos before sharing with family and friends and on social networking sites. This is achieved using complex video processing algorithms such as video stabilization, slow motion and digital zoom as well as creative manipulation and video-editing effects combined with intuitive user interfaces to manage the editing workflow. Aspiring Spielbergs can easily produce fantastic looking movies to share with their friends.

12 MP Camera: Quality is more than Megapixels

12 MP camera support provides JPEG encoding. Advanced processing includes low-light compensation, noise removal, sharpness enhance, white balance and color balance.

Image Effects Suite: High Definition Fun

Social photographers can create stunning and enhanced photos with the still image editing suite. The MA1102's image quality enhancement tools improve existing photos while creative image-editing effects can produce impressive photo results.

MA1102 Feature List

WVGA Camcorder Capture

- WVGA H.264 Camcorder Capture @ 30fps
- Video Stabilization to Reduce Camcorder Shake
- Auto White Balance, Color Balance
- Low Light Compensation

HD Video Playback

- WVGA H.264 Video Playback @ 30fps
- Quality Multi-Frame Upscaling to WVGA, 720p
- High Quality Downscaling to WVGA, QVGA
- Video Noise Removal – De-Noise, De-Flicker
- Active LCD Backlight Control for Low System Power
- HD 720p Video Output to External HDMI Driver Chip

High Resolution Camera Capture

- 12 MP Still Image Capture
- 12 MP Continuous Capture @ 5fps (JPEG encoding)
- Image Stabilization Reduces Camera Shake
- Auto White Balance, Color Balance, Light Balance, Sharpness Enhancement

Package & Supplies

- BGA, 8x8mm
- 1.2V Core Voltage / 2.5V IO Voltage / 1.8V DDR
- 3.3V/2.5V/1.8V LVTTTL-Compatible Interface IOs

Video Effects

- Video Stabilization, Super Resolution Zoom to any Non Center Location, High Quality Slow Motion
- Color Effects: Sepia, Grayscale, Negative, Edges, X-Ray, Color Themes etc.
- Saturation, Brightness, Contrast, Sharpness Enhancement
- Clip Add/Trim/Add Effect, Video Transitions, Image/Text Overlay, Audio Soundtrack, Titles & Credits
- Creative and Fun: Cartoon, Newspaper, Blur, Edges
- White Balance, Light Balance

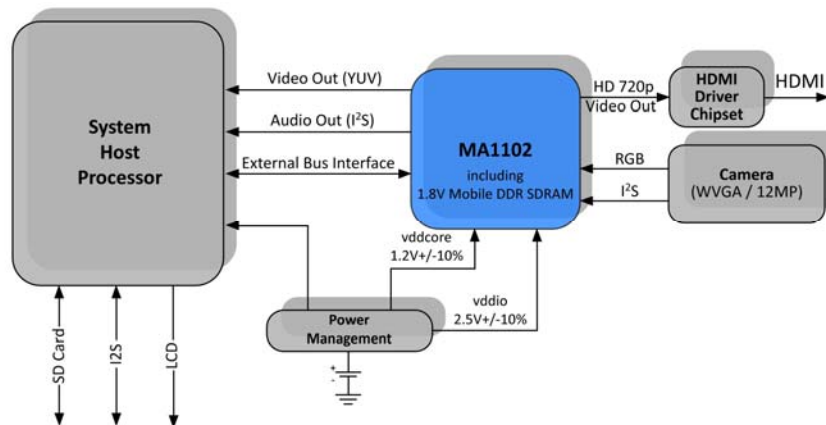
Image Effects

- (Auto) White Balance, Brightness, Contrast, Auto Tone, Saturation, Sharpness, Light Balance, De-Noise
- Crop, Rotate, Pan, Merge, Object Overlay
- High Resolution Digital Zoom, Color Themes, Sepia, Tint, Emboss, Edges, Negative, Saturation
- Fun Suite: Cartoon, Old Movie

Media Packages

- Movidius Standard Video Editing Package
- Movidius Standard Image Editing Package
- Movidius Advanced Video Editing Package (optional)
- Contact Movidius for Media Package feature details

MA1102 Typical Application Diagram



The Movidius MA1102 is part of the Movidius Myriad Family of Products

Visit <http://www.movidius.com> for more details

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Movidius is a fabless semiconductor company whose technology delivers unique video editing & post-production capabilities for the creation of User Generated Content for mobile social networking. Movidius' video processor hardware & application software is specifically designed to suit low power mobile phone & consumer electronics, enabling handset manufacturers to create highly differentiated products & enhanced user experiences.