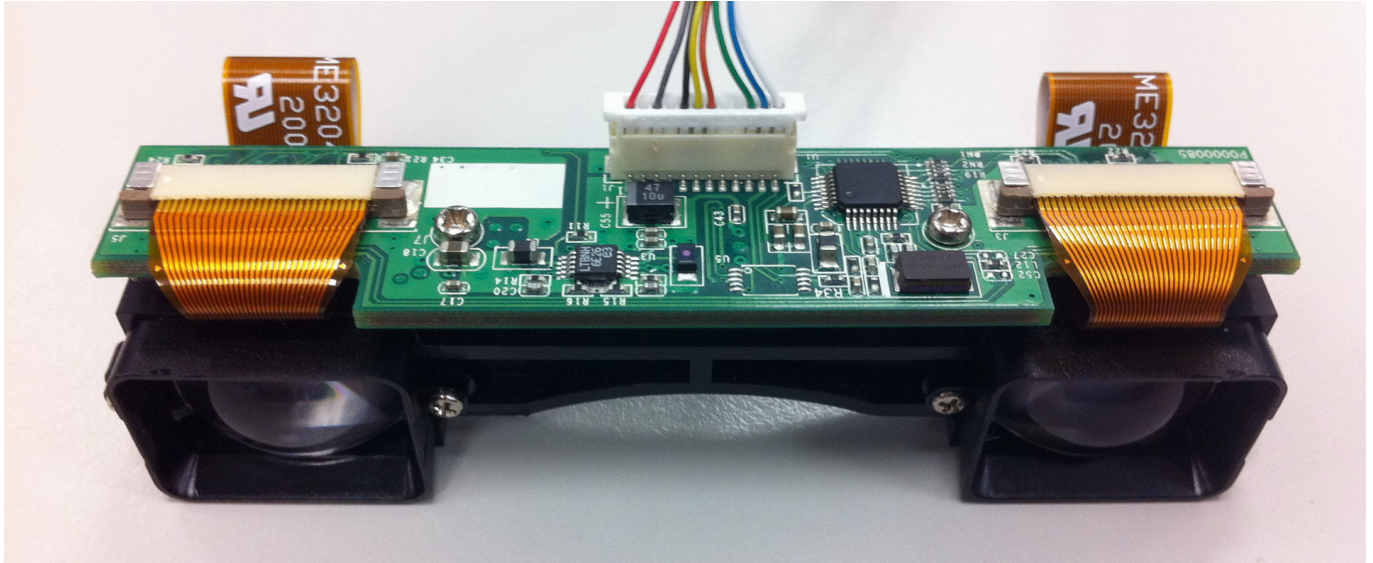


# IMMERSIVE QVGA BINOCULAR MODULE



## Brief Description

This immersive binocular module with QVGA resolution gives the user a fast way to test and to implement the SVPO320 OLED microdisplay in an Image, Video or Virtual Reality application.

The module realizes a 12x magnification by opening up a 22 degree field of view. The provided composite input allows connection to BT.656, NTSC or PAL signals, will automatically detect NTSC or PAL and setting the registers of the microdisplay accordingly, offers programmable frame rates up to 120Hz and allows digital brightness control.

The module only needs less than 50mW in normal operation and will automatically power down if it does not detect any video signals on its input.

The module can as well be used and controlled without using the given control electronics by attaching a 12-pin ribbon cable from an own developed electronics to the module.

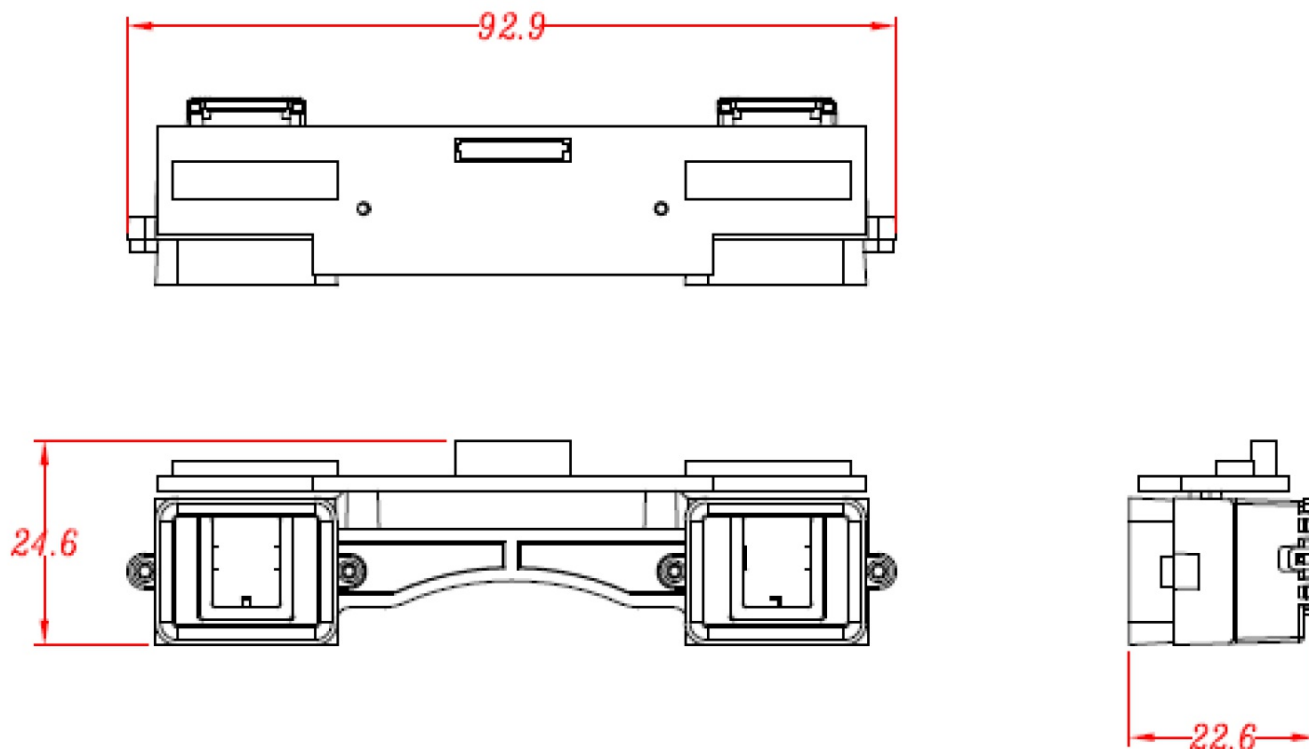
## Contact Information

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## Benefits

- Allows fast prototyping for any type of immersive glasses for simple image or video playback or for advanced Virtual Reality experiences.
- The given electronic allows connectivity to many systems using a CVBS input, which automatically detects NTSC or PAL signals and configures the microdisplay in the correct way.
- The very low weight and low power consumption of the module allows very lightweight and power-savy systems, which can be wearred for a long time without hurting noise and which can run for a very long time on one set of batteries.

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## Features

- Immersive preview method
- 12X magnification of image/video
- 22 degrees field of view
- Two rectangular plastic lenses
- 2 QVGA 320x240xRGB color microdisplays
- Format 432 x 240 with 24 bit color rate
- Frame Rate up to 120Hz (360Hz RGB field rate)
- White Color Temperature of 6,500K  $\pm$  500K
- Pixel array diagonal of 0.26"
- Pixel pitch of 15 $\mu$ m x 15 $\mu$ m
- Fill Factor > 90%
- Supports Composite Video interface
- Supports BT.656 and NTSC/PAL auto detection
- Digital Brightness Control
- Frame rate settable from 50 fps to 120 fps
- Low power consumption: < 50 mW
- Auto power down in absence of video signal

## Applications

- Electronic View Finders (EVF)
- Head Mounted Displays (HMD)
- Portable Electronic Equipment Headset Display

## 12-Pin Connector Description

Pin	Description
1	VCC
2	VCC
3	GND
4	GND
5	Brightness Up
6	Brightness Down
7	NTSC / PAL
8	Power Switch
9	Power On
10	Battery Low
11	GND
12	CVBS In

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