

249 725

## Specification Desktop Video Camera module

PAL: **VCM47C10/00**  
NTSC: **VC47C105**

### 1 Electrical

Image device	1/4" interline CCD
Number of pixels	512 (H) x 582(V) PAL 512 (H) x 492(V) NTSC
Horizontal resolution	≥ 330 TVL in center of picture
Scene illumination range	10 lux (50 IRE) to 100000 lux 3200K, lens transmission 80%, scene reflection 75%
White balance	Selectable: automatic (I <sup>2</sup> C controllable)
Color Temperature range	2500 - 8000K
Signal to noise ratio	> 48 dB (weighted) AGC off, ambient temperature 25 °C
Gamma	Fixed 0.45
Gain control	Automatic 0 to +20 dB. (I <sup>2</sup> C controllable)
Iris control	Electronic (shutterspeed control) (I <sup>2</sup> C controllable)
Synchronization	Free running
Video output	1 Vpp CVBS (75 Ω)
Audio output	Line level output: 400 mVpp (140 mVrms) at 1KHz. Maximum output level 1.6 Vpp non-clipping.
Power supply voltage	DC 5V +/-10%, ripple <100 mVpp.
Power consumption	<2W
I <sup>2</sup> C control	The user is able to control the following functions via I <sup>2</sup> C, (I <sup>2</sup> C is defined as single master). Preferred settings can be stored and are recalled when power is switched ON (user default mode). I <sup>2</sup> C controllable are: contrast, power on/off (standby), backlight compensation, contour correction, color on/off, white-balance (presets: FL, indoor, outdoor / auto-fixed / manual R,B-gain / delay), auto-exposure (shutterspeed incl. flickerless and AGC).

## 2 Mechanical

Lens Mounting	Integrated lens																								
Optical	optical low pass filter, IR filter																								
Image format	1/4"																								
Focal length	3.8 mm																								
Angle of view	50 deg. horizontal																								
Relative aperture	F3.0																								
Focus	manual from 0.5 cm to infinity																								
Dimensions	see mechanical drawings																								
Interfacing	connector B																								
Connector B	<table><thead><tr><th><u>pin</u></th><th><u>function</u></th></tr></thead><tbody><tr><td>1</td><td>supply voltage in</td></tr><tr><td>2</td><td>ground</td></tr><tr><td>3</td><td>CVBS out</td></tr><tr><td>4</td><td>ground</td></tr><tr><td>5</td><td>audio out</td></tr><tr><td>6</td><td>audio ground</td></tr><tr><td>7</td><td>I2C data</td></tr><tr><td>8</td><td>I2C clock</td></tr><tr><td>9</td><td>ground</td></tr><tr><td>10</td><td>not connected</td></tr><tr><td>11</td><td>not connected</td></tr></tbody></table>	<u>pin</u>	<u>function</u>	1	supply voltage in	2	ground	3	CVBS out	4	ground	5	audio out	6	audio ground	7	I2C data	8	I2C clock	9	ground	10	not connected	11	not connected
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Ambient temperature	operating: 0 to 45 °C (within full specification) storage: -25 to 70 °C																								

connector B

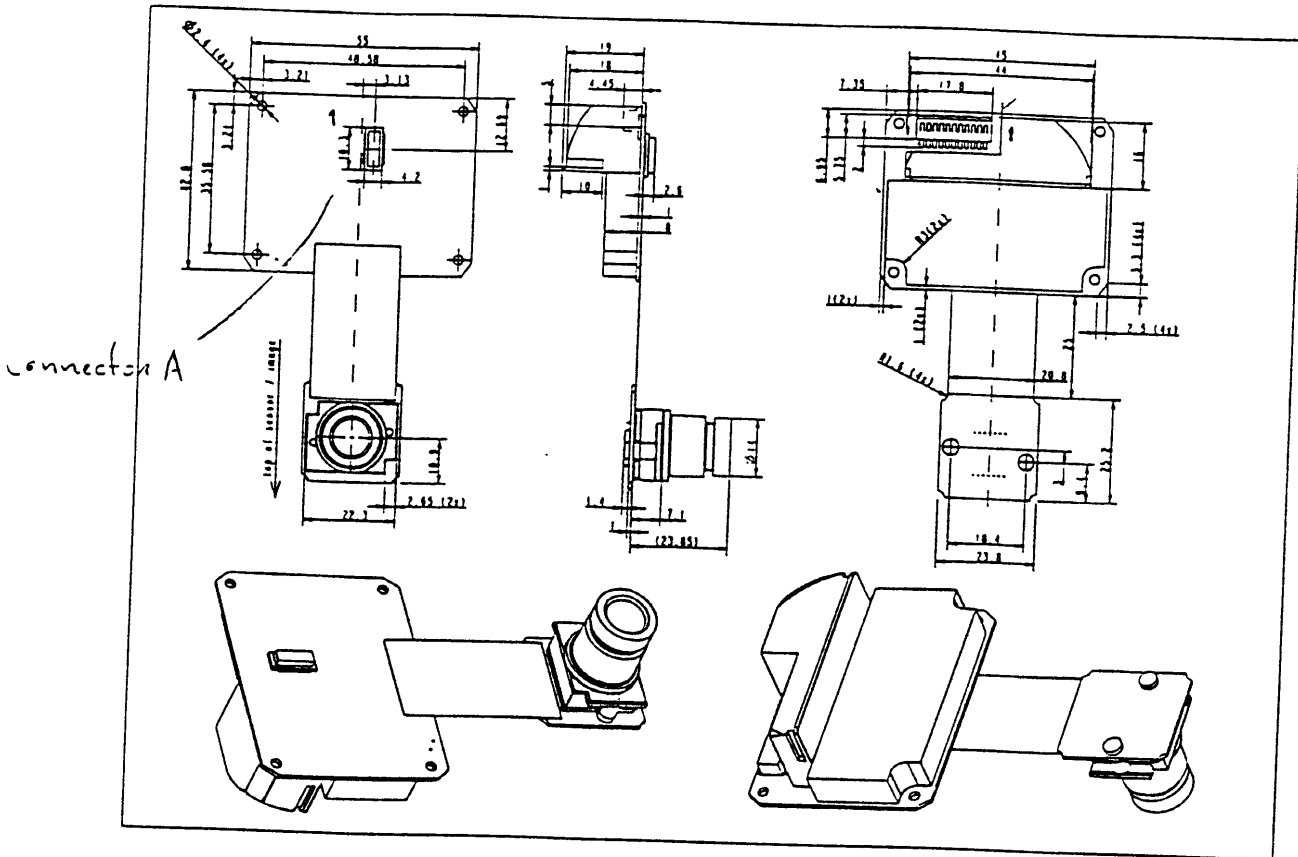


Figure 1: dimensions of the camera module

**Pinning connector A:**

1	LLC	30	UV4
2	GND	29	UV3
3	SCL	28	UV2
4	SDA	27	UV1
5	UV7	26	UV0
6	UV6	25	CREF
7	UV5	24	HREF
8	GND	23	VS
9	+VB (5 V in)	22	FIOUT
10	GND	21	GND
11	Y3	20	Y7
12	Y2	19	Y6
13	Y1	18	Y5
14	Y0	17	Y4
15	+VI (5V)	16	GND

**Pinning connector B:**

1	+VB (5 V in)
2	Supply GND
3	CVBS
4	GND (video)
5	Audio
6	GND (audio)
7	SDA (I <sup>2</sup> C)
8	SCL (I <sup>2</sup> C)
9	GND
10	Y out
11	C out