CM-140 GE / CB-140 GE

Progressive Scan

- Member of C3 Compact series, covering VGA to UXGA resolution
- 1392 (h) x 1040 (v) 4.65 μm square pixels
- 1/2” progressive scan - Monochrome and Bayer mosaic color versions
- 31 frames/second with full resolution in continuous operation
- 30 frames/second with external trigger and full resolution
- Increased frame rate with vertical binning (CM-140 GE) and partial scan
- Exposure time from 31 μs to 2 sec. using Pulse Width trigger mode
- Programmable exposure from 61.2 μs to 32.2 ms
- Sequencer trigger mode for on-the-fly change of gain, exposure and ROI
- LVAL-synchronous/-asynchronous operation (auto-detect)
- Auto iris lens video output allows a wider range of light
- GigE Vision interface with 10 or 8-bit output
- Programmable GPIO with opto-isolated inputs and outputs
- Comprehensive software tools and SDK for Windows XP/Vista

www.jai.com
Specifications for CM-140 GE / CB-140 GE

<table>
<thead>
<tr>
<th>Specifications</th>
<th>CM-140 GE / CB-140 GE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor</td>
<td>1/2&quot; progressive scan</td>
</tr>
<tr>
<td>Pixel Clock</td>
<td>65 MHz</td>
</tr>
<tr>
<td>Frame rate full frame</td>
<td>31.08 frames/second</td>
</tr>
<tr>
<td>(1052 lines per frame)</td>
<td></td>
</tr>
<tr>
<td>Active area</td>
<td>6.4 (h) x 4.8 (v) mm</td>
</tr>
<tr>
<td>Cell size</td>
<td>4.65 x 4.65 pixels</td>
</tr>
<tr>
<td>Active pixels</td>
<td>1392 x 1040</td>
</tr>
<tr>
<td>Color (CB-140 GE)</td>
<td>Raw Bayer output, host-based interpolation</td>
</tr>
<tr>
<td>Read-out modes</td>
<td></td>
</tr>
<tr>
<td>Full</td>
<td>1392 x 1040 (v) 31.08 fps</td>
</tr>
<tr>
<td>1/2 partial scan</td>
<td>1392 x 520 (v) 46.57 fps</td>
</tr>
<tr>
<td>1/4 partial scan</td>
<td>1392 x 260 (v) 61.92 fps</td>
</tr>
<tr>
<td>1/8 partial scan</td>
<td>1392 x 130 (v) 73.97 fps</td>
</tr>
<tr>
<td>2/3 partial scan</td>
<td>1392 x 694 (v) 39.97 fps</td>
</tr>
<tr>
<td>Vertical binning</td>
<td>1392 x 520 (v) 48.86 fps*</td>
</tr>
<tr>
<td>Region-of-interest (ROI)</td>
<td>User definable. Memory read-out</td>
</tr>
</tbody>
</table>
*NOTE: voltages above 13.2V DC only supported on CM-140 models with serial numbers of 140922 or higher and on CB-140 models with serial numbers of 141256 or higher

**NOTE:** voltages above 13.2V DC only supported on CM-140 models with serial numbers of 141256 or higher and on CB-140 models with serial numbers of 140922 or higher

Connector pin-out

Connector Pin-out

Pin 1 GND
2 +12 V DC input
3 Opto in (2)/GND
4 Opto in (2)/Auto iris lens
5 Opto in (2)
6 Opto in (2)
7 Opto out (1)
8 Opto out (1)
9 Opto out (1)
10 Opto out (1)
11 +12V DC input
12 GND

* Pins 3 and 4 can be configured by internal switch selection

GigE Vision interface

Accepts RJ-45 with thumbscrews

Spectral Response CM-140 GE

Spectral Response CB-140 GE

Ordering Information

CM-140 GE 1/2" Monochrome Progressive Scan Camera
CB-140 GE 1/2" Bayer Color Mosaic Progressive Scan Camera

Visit our web site on www.jai.com

See the possibilities