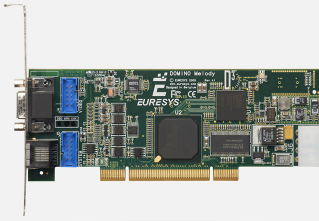




# Domino Melody

Low-profile frame grabber for one single-tap non-standard analog camera



## At a Glance

- One 10-bit 40 MHz A/D converter with one 8- or 10-bit LUT
- 32-bit 33 MHz PCI bus, standard and low profile brackets
- D<sup>3</sup> technology for extremely low synchronization jitter
- Support for mega-pixel progressive-scan and interlaced cameras, asynchronous reset and exposure control
- Trigger, strobe and general purpose I/O lines

## Benefits

Enjoy digital quality from low-cost analog cameras thanks to our patented D<sup>3</sup> technology

- Extremely low noise, true 10-bit image acquisition
- Lowest jitter: 0.5 ns (or 0.008 pixels) even when using composite video signals, for the most precise measurements
- No need to use pixel clock

Take advantage of the lowest-cost industrial cameras available on the market

Windows drivers available

## Applications

Machine Vision for the General Manufacturing Industries

- Low cost image acquisition from industrial analog cameras for inspection machines

## Specifications

### Mechanical

Form Factor	PCI card
Format	Low profile, half-length, 32-bit Conventional PCI card
Dimensions	L 168 mm x H 64 mm L 6.6 in x H 2.21 in

### Host bus

Standard	PCI 32-bit, 33 MHz, 3.3 V and 5 V signaling
----------	---

DMA	32-bit
Peak delivery bandwidth	132 MB/s
Effective (sustained) delivery bandwidth	90 MB/s (Host PC motherboard dependent)
Power consumption	Max. 6.8 W (1.45 A @ +3.3V, 400 mA @ +5V), excluding I/O power output

### Camera / video inputs

Interface standard(s)	Non-standard Analog
Connectors	<ul style="list-style-type: none"> <li>• CAMERA: high-density sub-D 15-pin male connector on the bracket</li> <li>• Camera internal: 10-pin shrouded header video connector on the PCB</li> </ul>
Termination resistor	Selectable by software
Number of cameras	One single-tap camera
Number of cameras (at full frame rate)	1
Line-scan cameras supported	No
A/D converter	One, 10-bit, 40 MHz
Maximum camera line rate	<ul style="list-style-type: none"> <li>• 49.5 kHz in synchronous mode</li> <li>• 31.5 kHz in asynchronous reset mode</li> </ul>

### On-board processing

On-board memory	16 MB (8 MB for image data)
Input LUT (Lookup Table)	1 x 8- or 10-bit LUT

### General Purpose Inputs and Outputs

Number of lines	<p>4 I/O lines:</p> <ul style="list-style-type: none"> <li>• 1 differential input (TR)</li> <li>• 1 opto-isolated output (ST)</li> <li>• 2 TTL inputs/outputs (ENHANCED IO)</li> </ul>
Connectors	<ul style="list-style-type: none"> <li>• SYSTEM: 8-pin RJ-45 connector on the bracket</li> <li>• SYSTEM INTERNAL: 10-pin dual-row 0.1" shrouded header on the PCB</li> <li>• CAMERA POWER: 4-pin Molex connector on the PCB for camera powering</li> </ul>
Usage	<ul style="list-style-type: none"> <li>• Camera and image acquisition trigger</li> <li>• Light strobe trigger</li> <li>• General purpose IO</li> </ul>
Electrical specifications	<ul style="list-style-type: none"> <li>• TR: Inputs compatible with TTL, LVTTTL, differential LVDS, differential RS-422, differential RS-485 signals, protected against electrostatic discharge, with choke for the rejection of common-mode noise</li> <li>• ST: Opto-isolated outputs, compatible with signals up to 60V, with 3 <math>\mu</math>s fall time, isolated up to 500V</li> <li>• ENHANCED IO Inputs or outputs compatible with TTL signals, protected against electrostatic discharge, with high-frequency noise filter</li> </ul>

### Software

Host PC Operating System	<ul style="list-style-type: none"> <li>• Microsoft Windows 10, 8.1, 7 for x86 (32-bit) and x86-64 (64-bit) processor architectures</li> <li>• Linux for x86 (32-bit) and x86-64 (64-bit) processor architectures</li> </ul> <p>Refer to release notes for details</p>
APIs	<ul style="list-style-type: none"> <li>• MultiCam 32- and 64-bit binary libraries (Windows and Linux), for ISO-compliant C/C++ compilers</li> </ul>

## Environmental conditions

---

Operating ambient air temperature	0 to +50 °C / +32 to +122 °F
Operating ambient air humidity	10 to 90% RH non-condensing
Storage ambient air temperature	-20 to +70 °C / -4 to +158 °F
Storage ambient air humidity	10 to 90% RH non-condensing

---

## Certifications

---

Electromagnetic - EMC standards	<ul style="list-style-type: none"><li>• European Council EMC Directive 2004/108/EC</li><li>• United States FCC rule 47 CFR 15</li></ul>
EMC - Emission	<ul style="list-style-type: none"><li>• EN 55022:2010 Class B</li><li>• FCC 47 Part 15 Class B</li></ul>
EMC - Immunity	<ul style="list-style-type: none"><li>• EN 55024:2010 Class B</li><li>• EN 61000-4-2</li><li>• EN 61000-4-3</li><li>• EN 61000-4-4</li></ul>
KC Certification	Korean Radio Waves Act, Article 58-2, Clause 3
Flammability	PCB compliant with UL 94 V-0
RoHS	European Union Directive 2011/65/EU (ROHS2)
REACH	European Union Regulation 1907/2006
WEEE	Must be disposed of separately from normal household waste and must be recycled according to local regulations

---

## Ordering Information

---

Product code - Description	<ul style="list-style-type: none"><li>• 1167 - Domino Melody</li></ul>
----------------------------	--

---



## AMERICA

### **Euresys Inc.**

27126-B Paseo Espada - Suite 704  
San Juan Capistrano, CA 92675 - United States  
Phone: +1 949 743 0612  
Email: sales.americas@euresys.com

## EMEA

### **Euresys SA**

Liège Science Park - Avenue du Pré Aily, 14  
4031 Angleur - Belgium  
Phone: +32 4 367 72 88  
Email: sales.europe@euresys.com

## EMEA

### **Sensor to Image GmbH**

Lechtorstrasse 20 -  
86956 Schongau - Germany  
Phone: +49 8861 2369 0  
Email: sales.europe@euresys.com

## ASIA

### **Euresys Pte. Ltd.**

750A Chai Chee Road - #07-15 Viva Business Park  
Singapore 469001 - Singapore  
Phone: +65 6445 4800  
Email: sales.asia@euresys.com

## CHINA

### **Euresys Shanghai Liaison Office**

Unit 802, Tower B, Greenland The Center - No.500 Yunjin Road, Xuhui District  
200232 Shanghai - China  
Euresys上海联络处  
上海市徐汇区云锦路500号绿地汇中心B座802室  
200232  
Phone: +86 21 33686220  
Email: sales.china@euresys.com

## JAPAN

### **Euresys Japan K.K.**

Expert Office Shinyokohama - Nisso Dai 18 Building, Shinyokohama 3-7-18  
Kouhoku-Ku, Yokohama-Shi 222-0033 - Japan  
〒222-0033  
神奈川県横浜市港北区新横浜3-7-18 日総第18ビル エキスパートオフィス新横浜  
Phone: +81 45 594 7259  
Email: sales.japan@euresys.com

More at [www.euresys.com](http://www.euresys.com)

