

SONY

COMMUNICATION CAMERA MODULE CCM-DS250

OEM/Component



The CCM-DS250 is a fully digital camera which adopts the "IEEE1394-1995(FireWire™)" standard. Through the IEEE1394-1995 high performance serial bus the CCM-DS250 provides high quality images and many features which ordinary cameras can not. The CCM-DS250 presents 30 frames per second in VGA(640×480)format.

- IEEE1394-1995 Standard for a High Performance Serial Bus (FireWire™)
- Digital Camera Protocol (rev. 1.04)
- 200Mbps, High Speed Data Transfers
- VGA (640×480), Non-Compressed YUV Digital Output
- 30 fps, Full Motion Picture
- Digital Signal Processing
- X12 Powered Zoom Lens
- Supplied Document Arm
- Privacy Shutter
- Tilt Adjustment

IEEE1394

*Digital Makes
The Difference.*

■Standard for a High Performance Serial Bus

High Speed Data Transfers : 100, 200 and 400 Mbps

The CCM-DS250 adopts 200 Mbps

DS-Link Encoding: High Efficiency for Data Transfers

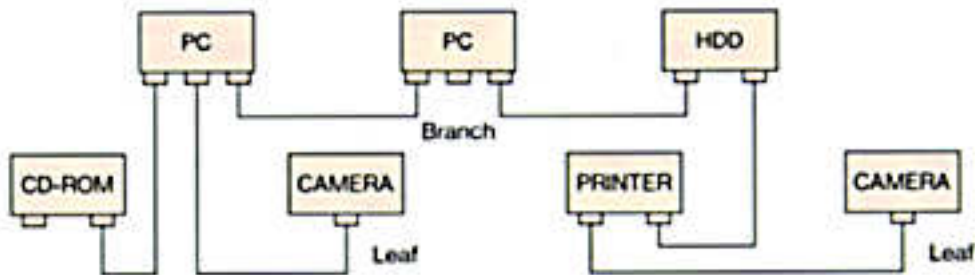
■Plug and Play

No Terminator Placement

Automatic Address Selection

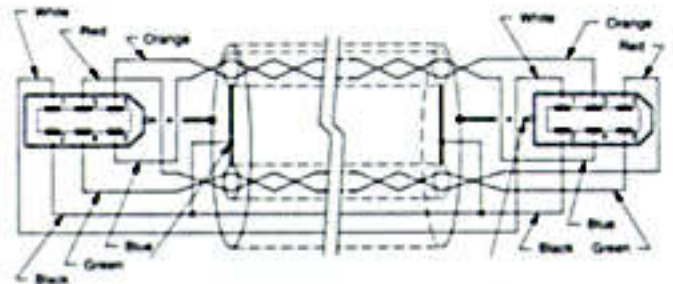
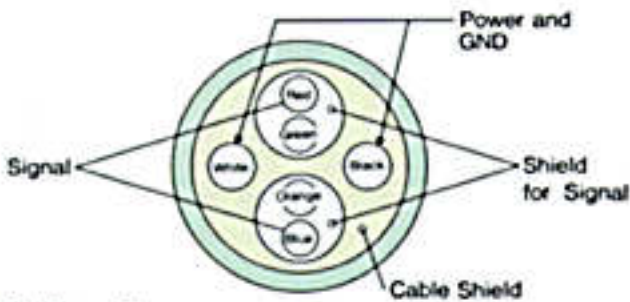
■Flexible Topology

Allowed for Branching and Daisy-chaining: Max of 63 Nodes

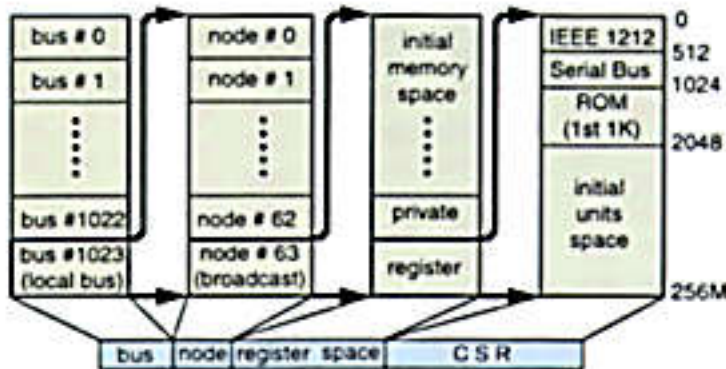


■Small Connector and Cable

6 Conductors Including Power



■Addressing

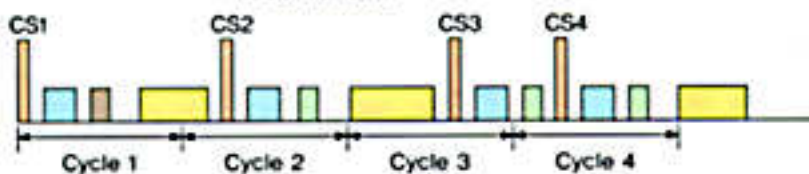


- Standardized Address from IEEE1212 Architecture
- Configuration ROM from IEEE1212 Architecture
- Direct 64bit Addressing (48 bits per node)

■Protocol

Two Subactions: Asynchronous

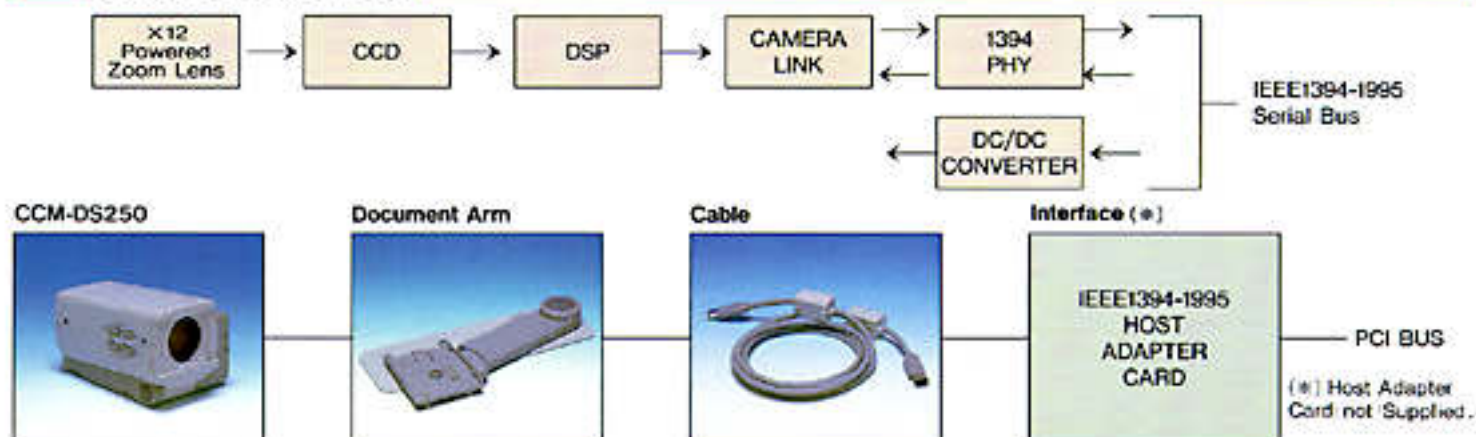
Isochronous



Isochronous

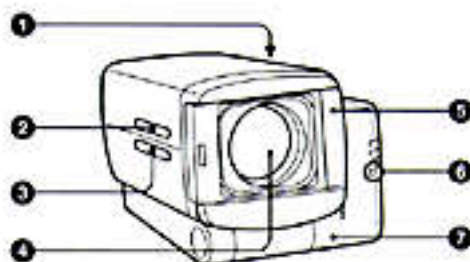
- Isochronous prior to Asynchronous
- Realized Real Time Transfers
- Broadcast
- Cycle Start appears every 125μsec.

CONSTRUCTION



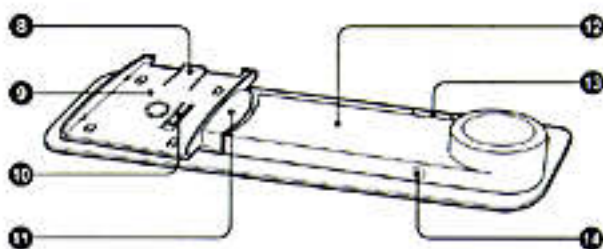
LOCATION AND FUNCTION OF CONTROL

CCM-DS250



- ① 6 Pin Connector
- ② Zoom Button (T-W)
- ③ Focus Button (N-F)
- ④ Lens
- ⑤ Privacy Shutter
- ⑥ Power Indicator (Green-Orange)
- ⑦ Tilt Stand

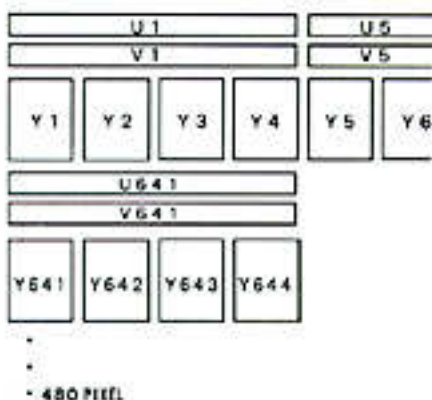
DOCUMENT ARM



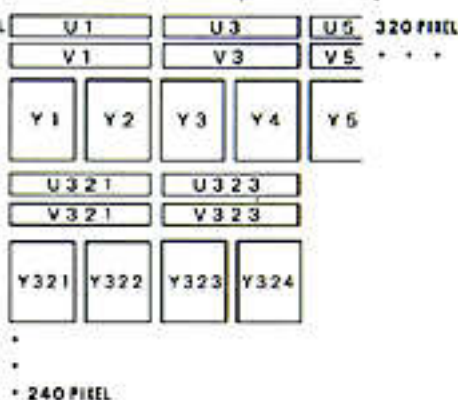
- ⑧ Camera Release Tab
- ⑨ Camera Base
- ⑩ Camera Base Release Tab
- ⑪ Pan Axis ($\pm 15^\circ$)
- ⑫ Arm (360° by 30° Increments)
- ⑬ Cable Clamp
- ⑭ Cap for Cable Clamp

IMAGE FORMAT

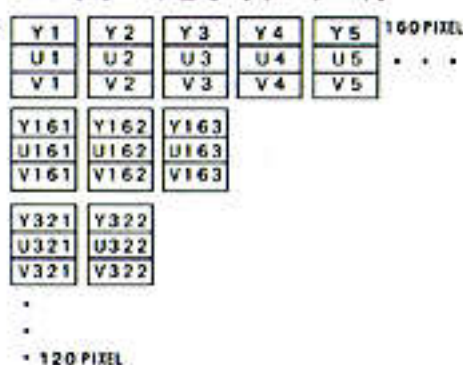
■ 640×480 (4:1:1)



■ 320×240 (4:2:2)



■ 160×120 (4:4:4)



DOCUMENT ARM

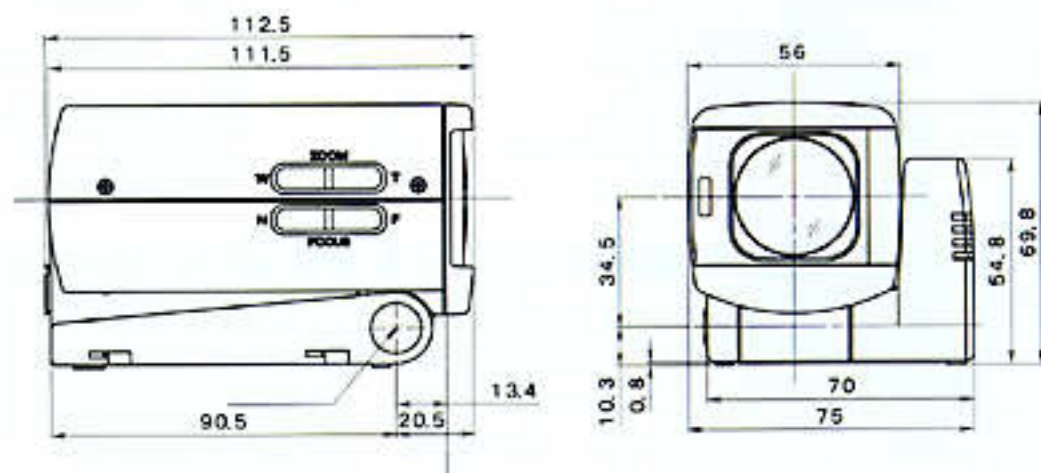


The CCM-DS250 captures the documents from business card size to letter size, as well as the face.

SPECIFICATIONS

Interface Format	IEEE1394-1995 (FireWire™)
Data Format	640X480 YUV (4 : 1 : 1), YUV 8bits each 320X240 YUV(4 : 2 : 2), YUV 8bits each 160X120 YUV(4 : 4 : 4), YUV 8bits each
Frame Rate	3.75, 7.5, 15.0 and 30 fps
Image Device	1/3" CCD
Mini. Sensitivity	30 lx (F1.8) (equivalent to analog)
White Balance	ATW and Manual Control
Shutter Speed	1/60 to 1/12000 sec
Gamma	0.45 (equivalent to analog)
Sharpness	Adjustable
Hue	Adjustable
Saturation	Adjustable
Brightness	Adjustable
Gain	Automatic and Manual Control
Iris	Automatic and Manual Control (F1.8 to close)
Focus	Powered Focus (Manual)
Zoom	X12 Powered Zoom (Manual) f=5.4 to 64.8mm, F1.8 to F2.7
Power	Supplied through IEEE1394-1995 Cable (8 to 30 vdc)
Dimensions	75X70X112mm (w/h/d)
Weight	350g (CCM-DS250), 300g (Document Arm)
Supplied Accessories	Document Arm, IEEE1394-1995 Cable (2m) and Operating Instruction

DIMENSIONS



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FireWire is a trademark of Apple Computer Inc.

*Design and specification are subject to change without notice. 87A