

EDID EEPROM for DDC2™ monitor

BU9882-W/F-W/FV-W

● Description

BU9882-W/F-W/FV-W is EEPROM for storing EDID™ based on DDC2™ of PC monitor. Due to the independent operating ports, and memory, this EEPROM can simultaneously communicate with two personal computers. There is also a switch that connects the PC to CPU in the monitor side, so that the PC can control the monitor.

● Features

- 1) 128word x 8bit x 2port configuration of 2kbit serial EEPROM
- 2) 2PC connection possible
- 3) 2port simultaneous read function when dual port used.
- 4) For DDC2™
- 5) Wide range of power supply voltage (2.5~5.5V)
- 6) Page write function (Max. 8Byte)
- 7) Low current consumption
 - Operating (5V) : 1.5mA (Typ.)
 - Stand by (5V) : 0.1μA (Typ.)
- 8) Inadvertent write protection function
 - Built-in noise filter to SCL, SDA pin
 - Write protection at low power supply voltage
- 9) High reliable Double-Cell system

● Applications

CRT monitor, LCD monitor, LCD projector

● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Supply Voltage	V _{CC}	-0.3 ~ 6.5	V
Power Dissipation	P _d	950 (DIP14) *1	mW
		450 (SOP14) *2	
Operating Temperature Range	T _{opr}	-40 ~ 85	°C
Storage Temperature Range	T _{stg}	-65 ~ 125	°C
Terminal Voltage	—	-0.3 ~ V _{CC} +1.0 *3	V

*1 Derating : 9.5mW/°C for operation above Ta=25°C *2 Derating : 4.5mW/°C for operation above Ta=25°C

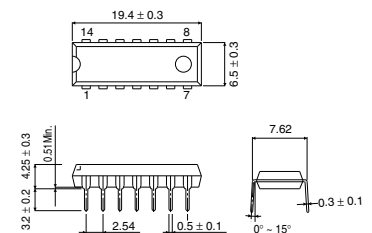
*3 Maximum: 6.8V

● Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	V _{CC}	2.5	—	5.5	V
Input Voltage	V _{IN}	0	—	V _{CC} +1.0	V

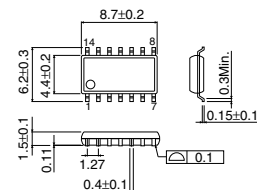
● Dimension (Units : mm)

BU9882-W



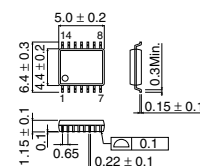
DIP14

BU9882F-W



SOP14

BU9882FV-W



SSOP-B14

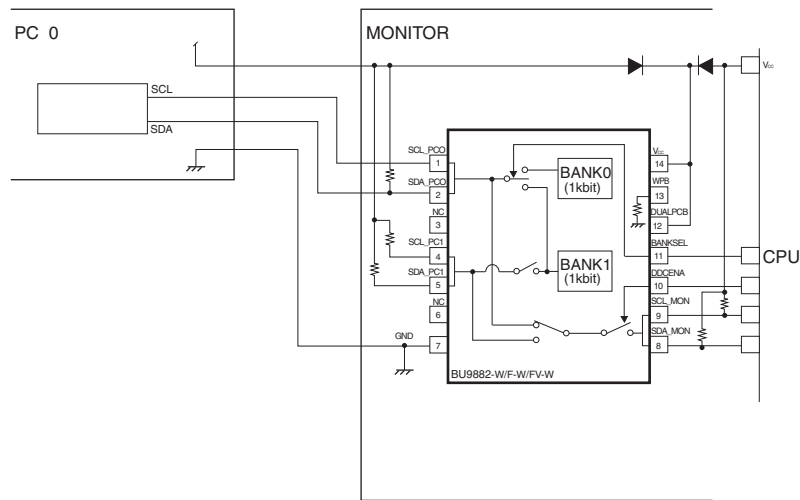
● Electrical characteristics (Unless otherwise specified; Ta=−40 ~ 85°C, Vcc=2.5 ~ 5.5V)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
"H" Input Voltage 1	VIH1	2.0	—	—	V	
"L" Input Voltage 1	VIL1	—	—	0.8	V	V _{CC} ≥4.0V
"L" Input Voltage 2	VIL2	—	—	0.2V _{CC}	V	V _{CC} <4.0V
"L" Output Voltage	VOL1	—	—	0.4	V	SDA_PC0/1, IOL=3.0mA*
Input Leak Current 1	ILI1	−1	—	1	μA	SCL_PC0/1, DDCENA,BANKSEL,VIN=0V~V _{CC} +1.0V
Input Leak Current 2	ILI2	−1	—	50	μA	WPB
Output Leak Current	ILO	−1	—	1	μA	SDA_PC0/1,SCL/SDA_MON(DDCENA=GND), VOUT=0V~V _{CC} +1.0V
Operating Current	ICC	—	—	3.0	mA	fSCL=400kHz, V _{CC} =5.5V
Stand by current	ISB	—	0.1	5	μA	SCL/SDA_PC0/1=V _{CC} SCL/SDA_MON=Hi—Z DDCENA=WPB=BANKSEL=GND, DUALPCB=V _{CC}

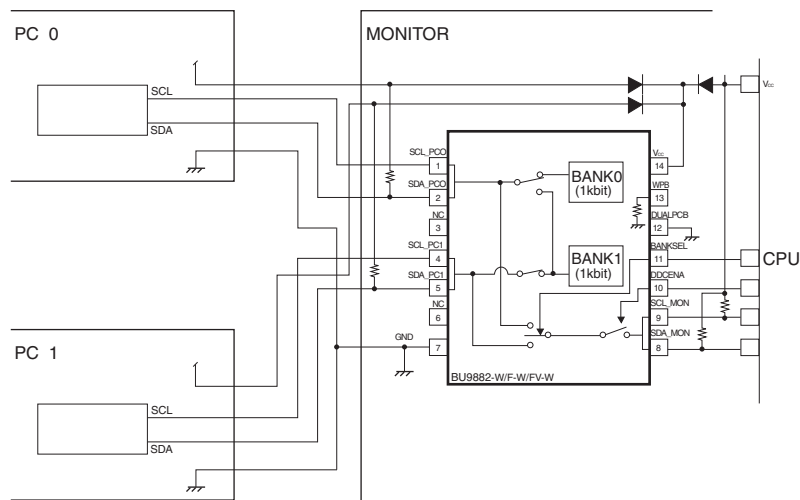
* IOL at monitor mode (DDCENA=High) is sum of current flowed from Pull up resistance on SDA_MON side, and Pull up resistance on SDA_PC0/PC1 side.

● Application Circuit

< SINGLE Port >



< DUAL Port >



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