

Clock generator IC

BU2286FV

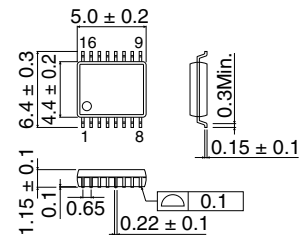
● Description

BU2286FV is an IC that generates multiple clocks from the built-in 2ch PLL of the external crystal oscillator used for DVD system. This IC creates six kinds of signals for video, audio, and low jitter system.

● Features

- 1) Can generate clock signals needed for DVD by a single chip
- 2) All output low jitter (No load 30ps)
- 3) Built-in PLL loop filter, No external components needed
- 4) 3.3V single power supply
- 5) Small SSOP-B16 package

● Dimension (Units : mm)



SSOP-B16

● Applications

DVD sets

● Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Maximum applied voltage	V _{DD}	-0.5 ~ 7.0	V
Power dissipation	P _d	450	mW
Operating temperature range	T _{opr}	-10 ~ +70	°C
Storage temperature range	T _{stg}	-30 ~ +125	°C

Derating :4.5mW/°C for operation above Ta=25°C

● Recommended Operating Conditions (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	V _{DD}	3.0	3.3	3.6	V

● Electrical characteristics (Unless otherwise noted; Ta=25°C, V_{DD}=3.3V, Crystal frequency=27MHz)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Operating circuit current	IDD	—	30	50	mA	No load
CLK54M	CLK54M	—	54	—	MHz	XTAL 375/64/4
CLK27M	CLK27M	—	27	—	MHz	XTAL 375/64/8
CLK33M	CLK33M	—	33.8688	—	MHz	XTAL 147/40/4
CLK16M	CLK16M	—	16.9344	—	MHz	XTAL 147/40/8
CLK768FS1	CLK768_H	—	36.864	—	MHz	FSEL1=OPEN XTAL output
	CLK768_L	—	33.8688	—	MHz	FSEL1=L XTAL 147/40/4
CLK384FS2	CLK384_H	—	18.432	—	MHz	FSEL1=OPEN XTAL/2 output
	CLK384_L	—	16.9344	—	MHz	FSEL1=L XTAL 147/40/8
Duty	Duty	45	50	55	%	Measured by1/2VDD
Jitter1	JsSD	—	50	—	ps	Short term Jitter 1
Jitter Min.–Max.	JsABS	—	300	—	ps	Min.–Max.

● Application Circuit

