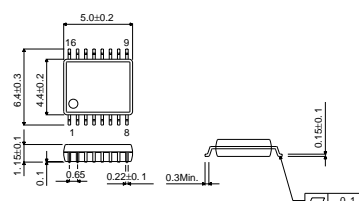


Clock generator IC BU2288FV

●Description

The BU2288FV is an IC that generates plural clocks required for DVD system from a 2-channel PLL external crystal oscillator. The six kinds of signals for video and audio system are generated with low jitter.

●Dimension (Units : mm)



●Features

- 1) All clock signals needed for DVD can be generated by a single chip.
- 2) All output low jitter (No load 30psec)
- 3) No need for additional components.
(BU2288FV has a PLL loop filter inside.)
- 4) 3.3V single power supply
- 5) Small SSOP-B16 package

SSOP-B16

●Applications

All DVD sets

●Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power supply voltage	V _{DD}	3.0 ~ 3.6	V
Power dissipation	P _d	450 *	mW
Operating temperature range	T _{opr}	-5 ~ +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	I _{DD}	–	27	40.5	mA	No load
CLK512FS	CLK512-A	–	22.5792	–	MHz	XTAL*3136/625/6 (FSEL1=OPEN)
	CLK512-B	–	24.576	–	MHz	XTAL*2048/375/6 (FSEL1=L)
CLK33M	CLK33M	–	33.8688	–	MHz	XTAL*3136/625/4
CLK16M	CLK16M	–	16.9344	–	MHz	XTAL*3136/625/8
CLK27M	CLK27M	–	27	–	MHz	XTAL direct
CLK A	CLKA-A	–	16.9344	–	MHz	XTAL*3136/625/8 (FSEL1=OPEN)
	CLKA-B	–	36.864	–	MHz	XTAL*2048/375/4 (FSEL1=L)
Duty	Duty	45	50	55	%	1/2V _{DD} test
Jitter 1σ	J _{sSD}	–	70	–	psec	Short time Jitter 1σ
Jitter Min.-Max.	J _{sABS}	–	420	–	psec	Min.-Max.

● Application Circuit

