

# Multi-channel System Power Supply ICs for Large Panel

4ch  
VIN 6~18V  
Variable Output  
0.5 MHz

SOFT START  
INFRARED

V<sup>+</sup>  
VCOM

**BD8166EFV**

19V MAX.  
-40°C +85°C  
4kV OCP AUTO

Recovery T.S.D. V O.V.P. UV LO

4ch  
VIN 8~18V  
Variable Output  
0.5/0.75 MHz

SOFT START  
VARIABLE

V<sup>+</sup>  
VCOM

**BD8160AEFV**

20V MAX.  
-40°C +85°C  
4kV OCP AUTO

Recovery T.S.D. V O.V.P. UV LO

7ch  
VIN 4.2~14V  
Variable Output  
0.65 MHz

V<sup>+</sup>  
VCOM

**BD8165MUV**

15V MAX.  
-40°C +85°C  
4kV OCP AUTO

Recovery T.S.D. V O.V.P. UV LO

7ch  
VIN 4.2~14V  
Variable Output  
Variable Frequency

V<sup>+</sup>  
VCOM

**BD8162EKV**

15V MAX.  
-40°C +85°C  
4kV OCP AUTO

Recovery T.S.D. V O.V.P. UV LO

5ch  
VIN 4.4~14V  
Fixed/Variable Output  
0.5 MHz

**BD8172MUV**

15V MAX.  
-25°C +105°C  
4kV OCP AUTO

Recovery T.S.D. V O.V.P. UV LO

6ch  
VIN 10~18V  
Variable Output  
0.5 MHz

POWER GOOD

START/UP SEQUENCE  
V<sup>+</sup>  
VCOM

**BD81002MUV**

20V MAX.  
-25°C +105°C  
2kV

TIMER LATCH  
Short Protection Recovery T.S.D. UV LO

6ch  
VIN 10~14V  
Fixed/Variable Output  
0.7 MHz

POWER GOOD

I<sup>2</sup>C  
START/UP SEQUENCE  
V<sup>+</sup>  
VCOM

**BD8174MUV**

15V MAX.  
-25°C +105°C  
2kV

TIMER LATCH  
Short Protection Recovery T.S.D. V O.V.P. UV LO

## Symbol key

1ch 3ch 4ch 5ch 6ch 7ch 10ch 12ch 14ch 18ch Channels

VIN 1.8~5.5V VIN 2.0~5.5V VIN 2.1~4V VIN 2.1~6V VIN 2.5~5.5V VIN 2.6~5.5V VIN 4.2~14V VIN 4.4~14V VIN 6~18V VIN 8~18V VIN 10~14V VIN 10~18V Input voltage range

Variable 10 Output  
Variable 12 Output  
Variable 14 Output  
Variable 18 Output  
Variable Output

Fixed/Variable Output  
Fixed/Variable Output  
Fixed/Variable Output

0.5 MHz 0.65 MHz 0.7 MHz 1.1 MHz 1.2 MHz 0.5/0.75 MHz 0.6/1.2 MHz Operating frequency

Variable Frequency  
Variable Frequency

PFM PWM Support auto PFM/PWM mode

SOFT START  
INFRARED  
Adjustable soft start

DIS CHARGE Built-in output discharge function

POWER GOOD Power good function

EEPROM Built-in EEPROM

START/UP SEQUENCE Built in power on sequence

I<sup>2</sup>C BUS Interface

V<sup>+</sup>  
VCOM Buffer amp for back plate bias

AUTO READ  
10110101 Automatic data read function

3 WIRE 3-wire serial interface

## Multi-channel System Power Supply ICs for Large Panel

Part No.	Supply voltage (V)	Operating temperature (°C)	Operating frequency (MHz)	Output for source voltage (V)	Output for logic voltage (V)	Output for logic voltage2 (V)	Output for gate voltage (V)	Start up sequence circuit	V COM (ch)	Package
<b>BD8166EFV</b>	6.0 to 18.0	-40 to +85	0.5	to 18.0	Variable	-	Variable	✓	1	HTSSOP-B40
<b>BD8160AEFV</b>	8.0 to 18.0	-40 to +85	0.5/0.75	to 18.0	Variable	-	Variable	✓	-	HTSSOP-B28
<b>BD8165MUV</b>	4.2 to 14.0	-40 to +85	0.65	to 18.0	Variable	Variable	Variable	✓	1	VQFN048V7070
<b>BD8162EKV</b>	4.2 to 14.0	-40 to +85	0.2 to 0.8	to 18.0	Variable	Variable	Variable	✓	<sup>1</sup> (Buffer 4ch)	HTQFP64V
<b>BD8172MUV</b>	4.4 to 14.0	-40 to +105	0.5	15.6	3.3	-	$\oplus$ 35.2/ $\ominus$ Variable	✓	$\ominus$ (Buffer 4ch)	VQFN040V6060
<b>BD81002MUV</b>	10.0 to 18.0	-25 to +105	0.5	to 18.0	Variable	Variable	Variable	✓	1	VQFN048V7070
<b>New BD8174MUV</b>	10.0 to 14.0	-40 to +105	0.7	to 18.0	3.3	1.2/1.5/1.8	+ 35.2 - 6.0	✓	<sup>1</sup> (Buffer 4ch)	VQFN048V7070