

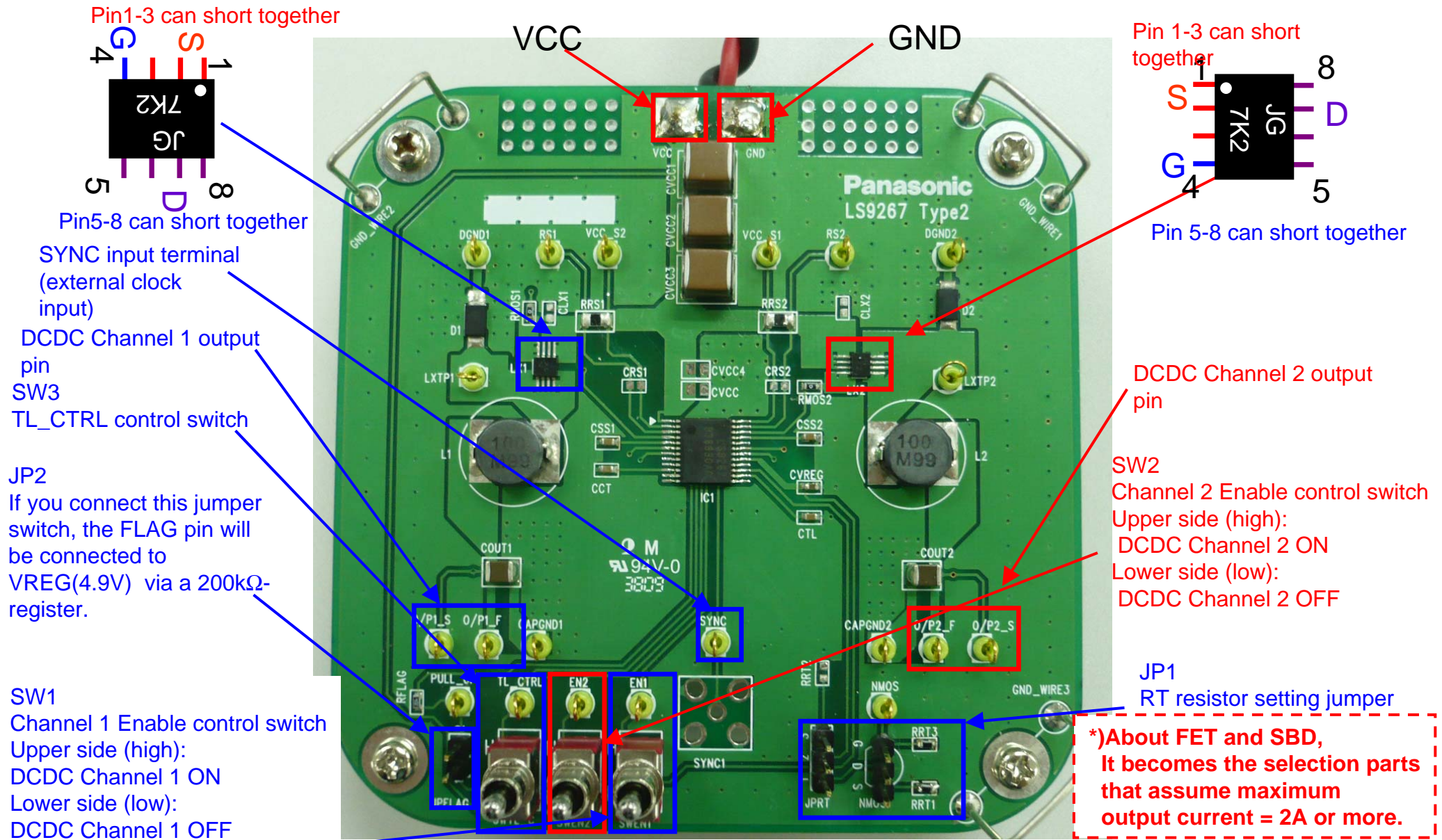
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# AN33012UA

## Evaluation Board Manual

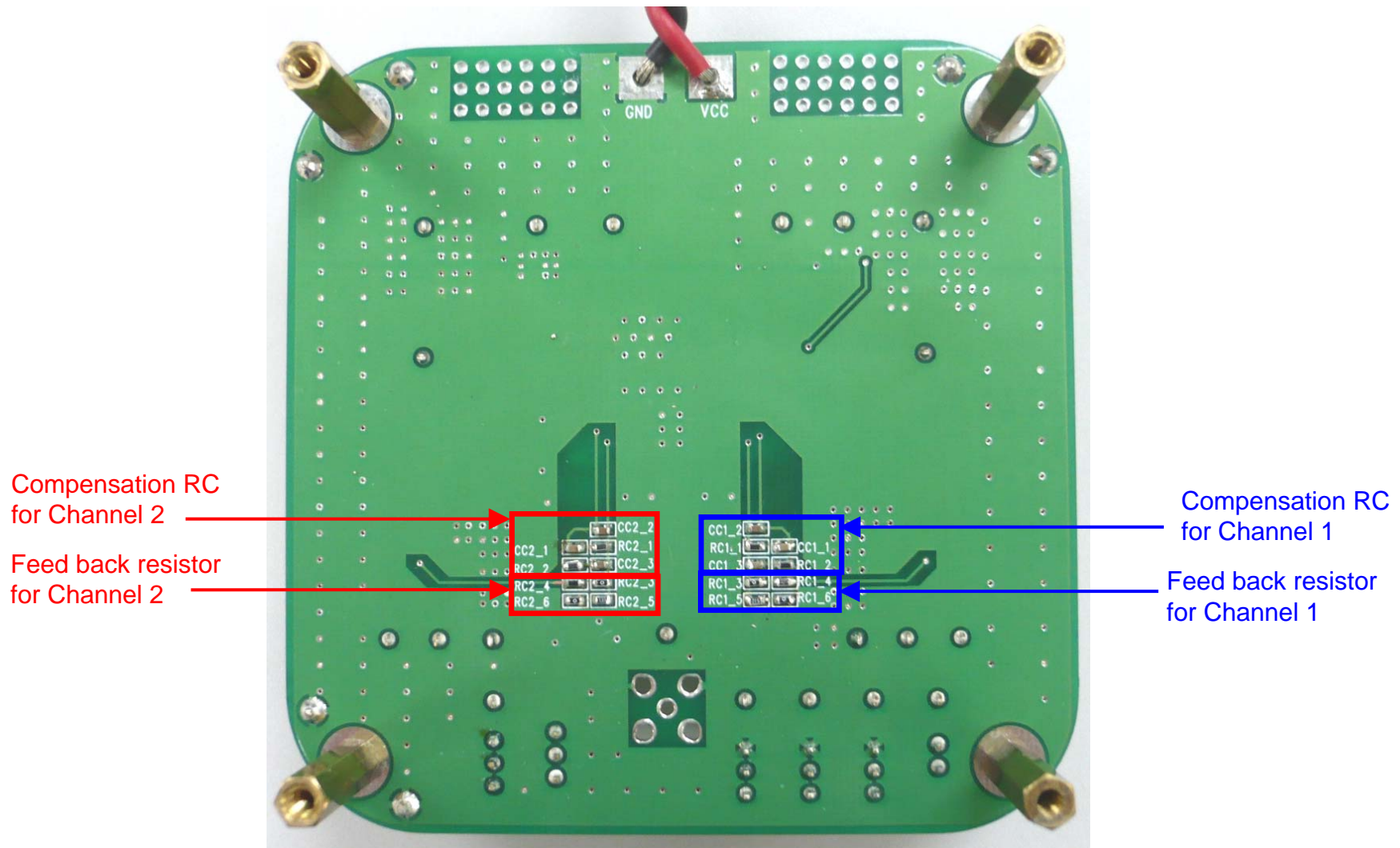
**Panasonic Corporation**  
**Automotive & Industrial Systems Company**  
**Semiconductor Business Division**

# AN33012UA Evaluation board (front side)



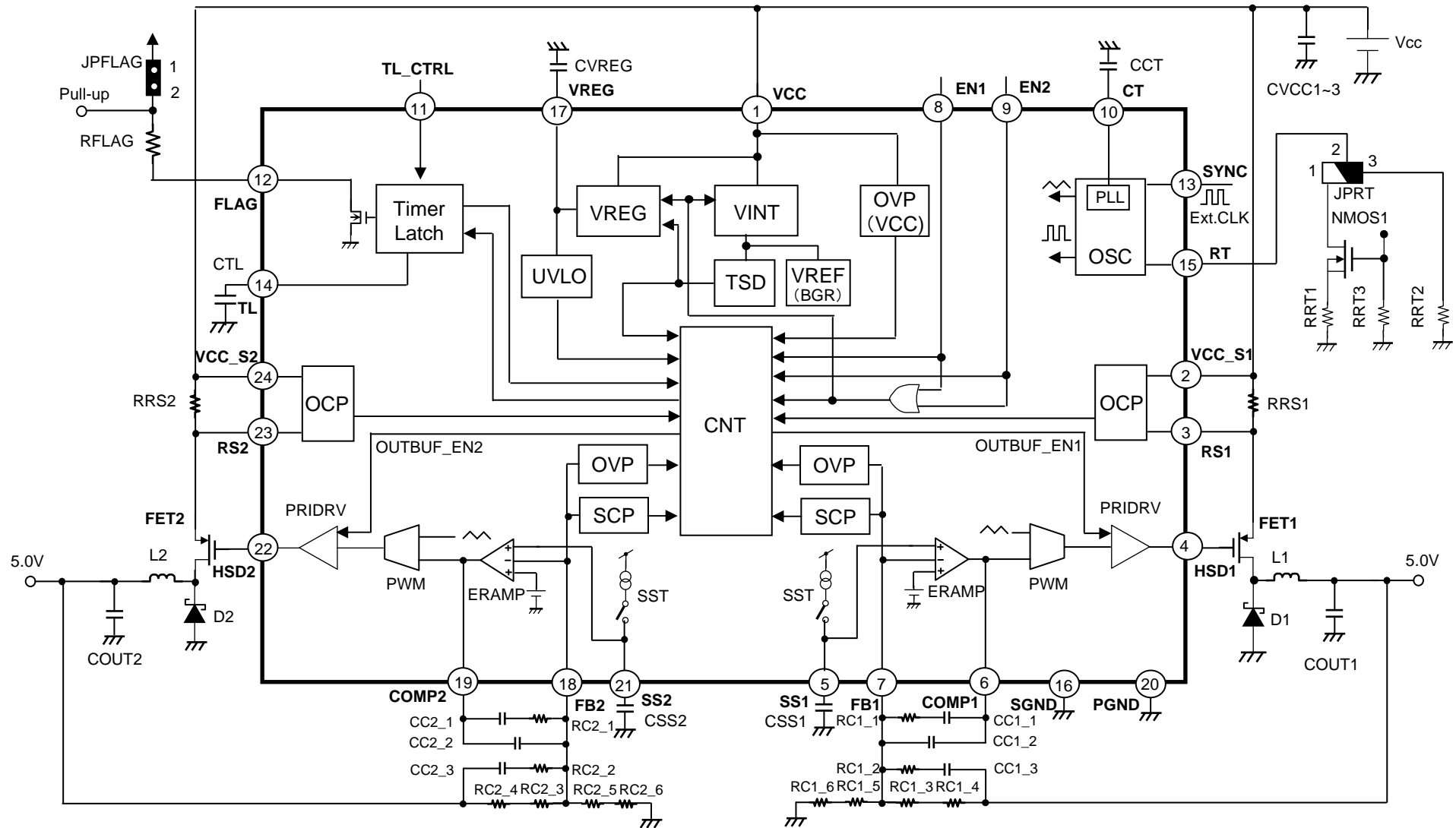
## AN33012UA Evaluation board (back side)

This is a two layer circuit board. The back side is shown below. (The front side is shown on the previous page.)



# AN33012UA Evaluation board (schematic)

The block diagram of the board is shown below.



# AN33012UA Evaluation board (components)

The BOM of this board is shown below.

**Table 1 : component on the evaluation board (reference)**

Board Component Name	Part Name	Size	Value	Maker	Description
CC1_1,CC2_1	GCM1882C1H222JA01J	JIS1608_[EIA0603]	2.2nF	Murata	Compensation Capacitor
CC1_2,CC2_2	GCM1882C1H270JA01J		27pF	Murata	Compensation Capacitor
CC1_3,CC2_3	GCM1882C1H471JA01J	JIS1608_[EIA0603]	470pF	Murata	Compensation Capacitor
CCT,CSS1,CSS2,CTL	GCM188R11C104KA01J	JIS1608_[EIA0603]	0.1uF	Murata	Setting Capacitor
CVREG	GCM188R71C105KA49J	JIS1608_[EIA0603]	1uF	Murata	VREG Capacitor
CVCC1,CVCC2,CVCC3	CKG57NX7R1H226MT	JIS5750[EIA2220]	22μF	TDK	Input Capacitor
COU1,COU2	TMK325C7226MM-T	JIS322_[EIA1210]	22μF	TAIYO YUDEN	Output Capacitor
LX1,LX2	ECH8305		—	SANYO	PMOSFET
L1,L2	CDRH8D43-100NC	8.3(L) x 8.3(W)	10μH	SUMIDA	Inductor
IC1	AN33012UA		—	Panasonic	2ch DC-DC Controller
D1,D2	DB24416	3.8(L) x 2.4(W)	—	Panasonic	Schottky Diode
RC1_1,RC2_1, RC1_5,RC2_5	ERA3AEB752V	JIS1608_[EIA0603]	R=7.5k	Panasonic	Compensation & Feedback Resistor
RC1_3,RC2_3, RC1_6,RC2_6	ERJ3GEY0R00V	JIS1608_[EIA0603]	R=0	Panasonic	Compensation & Feedback Resistor
RC1_2,RC2_2	ERA3AEB152V	JIS1608_[EIA0603]	R=1.5k	Panasonic	Compensation & Feedback Resistor
RC1_4,RC2_4	ERA3AEB303V	JIS1608[EIA0603]	R=30k	Panasonic	Compensation & Feedback Resistor
RFLAG	ERA3AEB204V	JIS1608_[EIA0603]	R=200k	Panasonic	Pull-up Resistor
RMOS1-2	ERJ3GEY0R00V	JIS1608_[EIA0603]	R=0	Panasonic	
RRT1	ERA3AEB134V	JIS1608_[EIA0603]	R=130k	Panasonic	OSC Setting Resistor
RRS1,RRS2	ERJ8BWFR011V		R=11m	Panasonic	OCP Sense Resistor

Note: The specifications of the BOM are reference values. Other components might be mounted depending on target values of output voltage, frequency, etc.



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