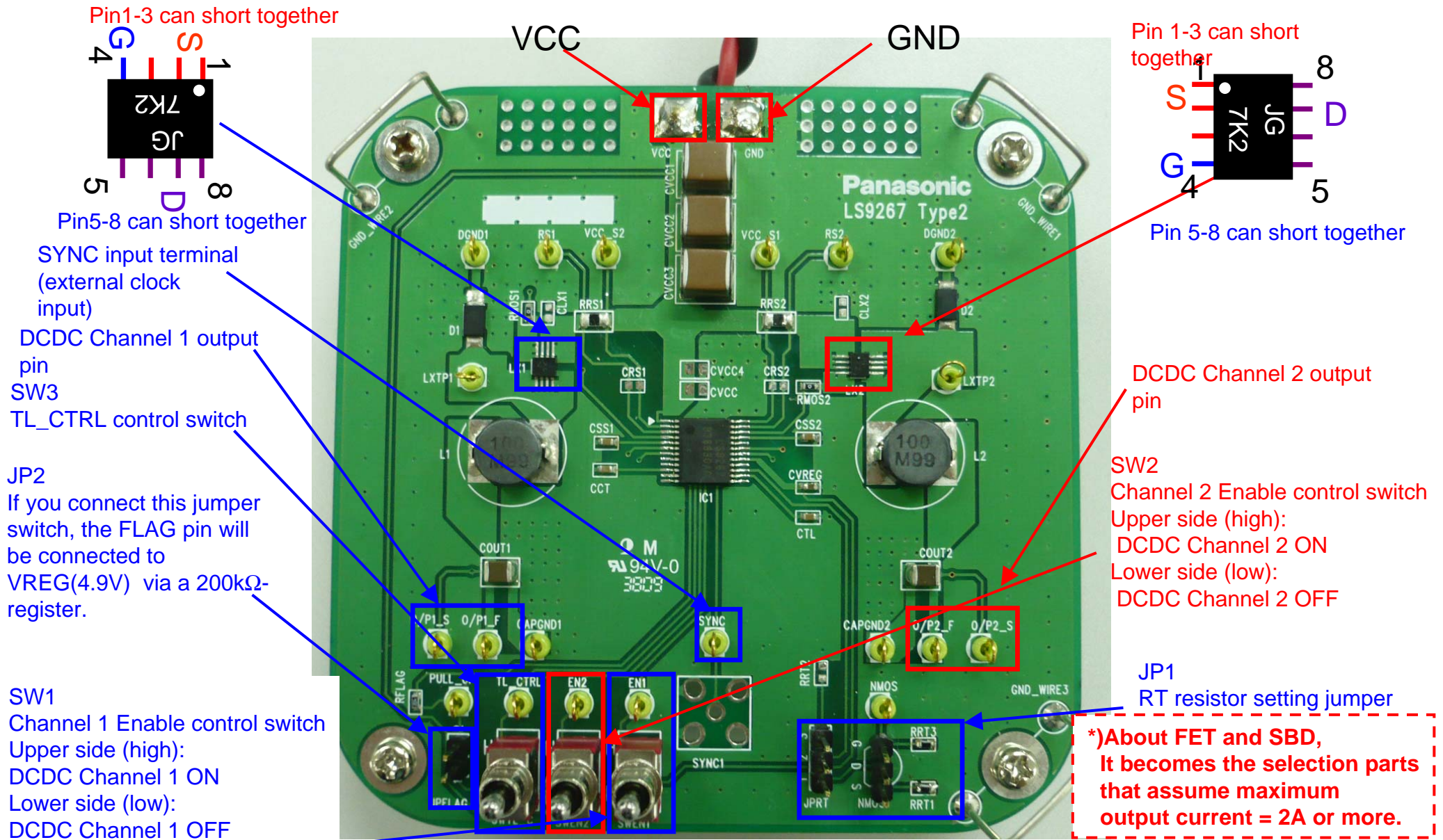

AN33012UA

Evaluation Board Manual

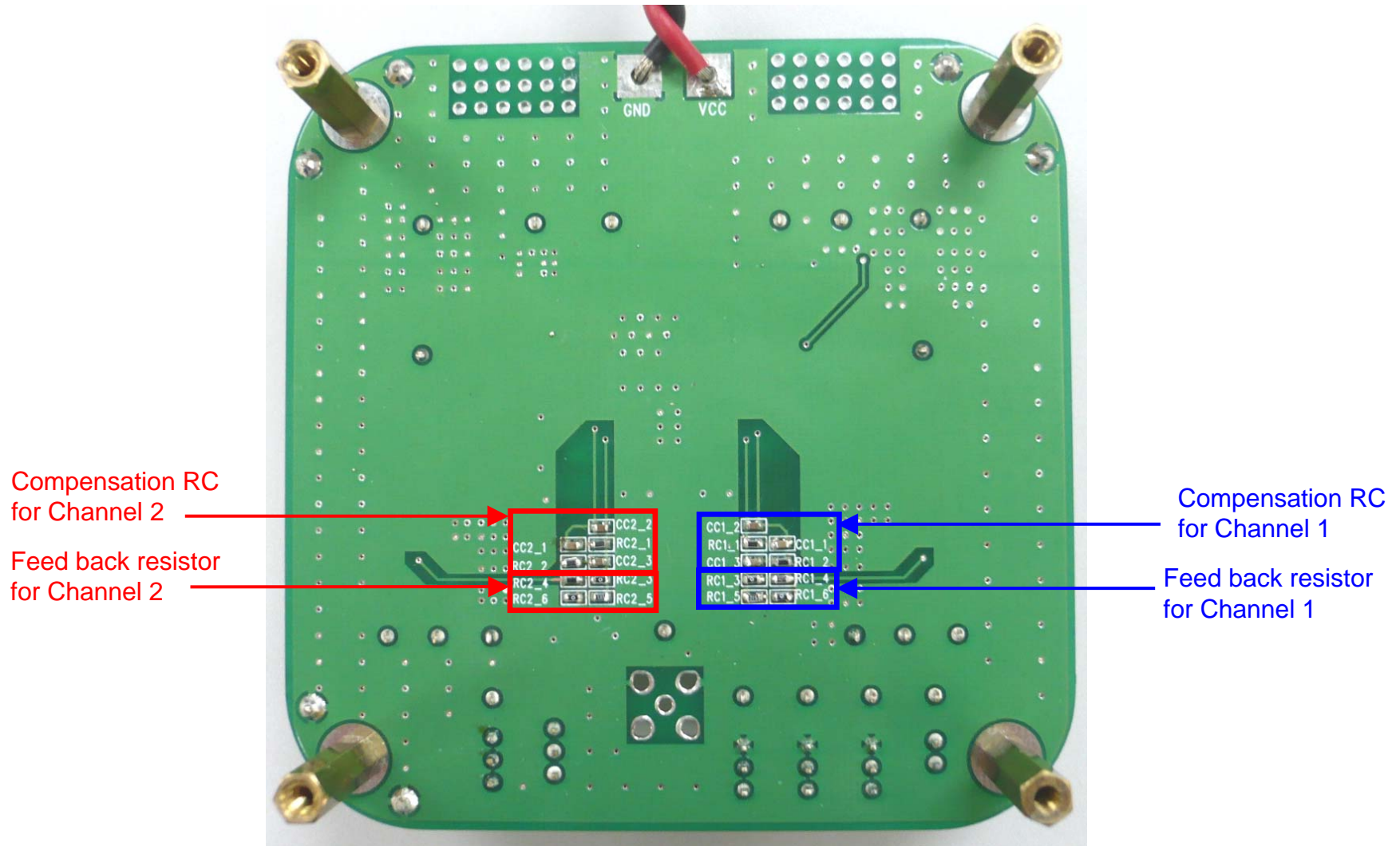
Panasonic Corporation
Automotive & Industrial Systems Company
Semiconductor Business Division

AN33012UA Evaluation board (front side)



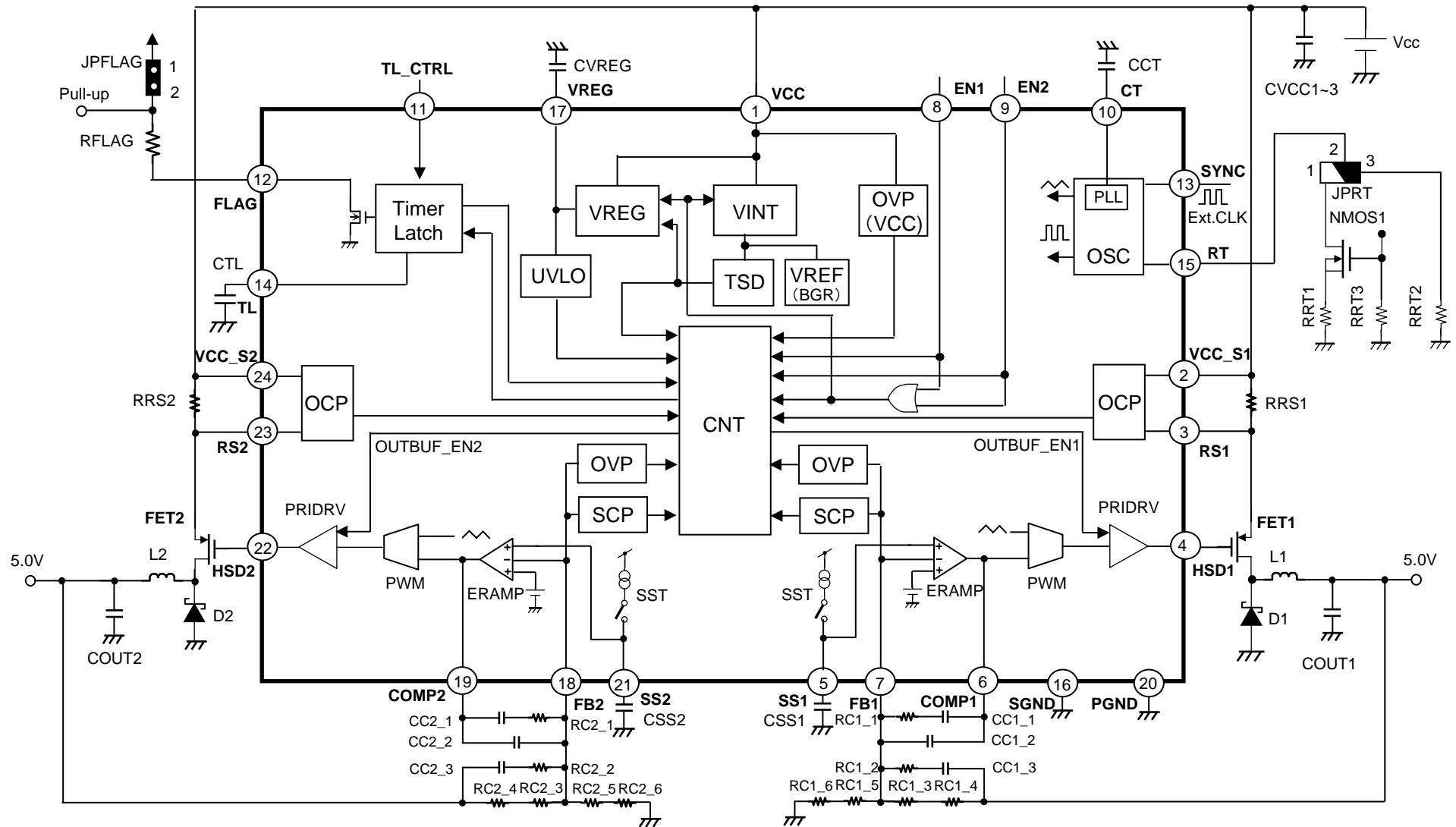
AN33012UA Evaluation board (back side)

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
COUT1,COUT2	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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