Hitachi High Voltage ICs
Status List

Date: Sept. 2018

Compliance status of RoHS directive

C:Compliant **S.C**:Compliant (Included RoHS exemption substance) **N**:Non compliant

Production Status

M:Mass production **O**:Order production **U**:Under development **W**:Working sample **D**:Discontinued

Please order Hitachi High Voltage IC products 1,000pcs/M or 3,000pcs/Lot or more at the time of mass production.

Motor Driver IC (Single Chip Inverter)

◆VSP Input Series (Charge pump system)
Brushless motor application

Type	Voltage(V)		Current(A)		Remarks	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN30110F/P	15	250	1.4	1.0	Power on/off sequence-free, Embedded Hall amplifiers, high-voltage diodes	C	M
ECN30210F/P	15	600	1.5	0.7	Power on/off sequence-free, Embedded Hall amplifiers, high-voltage diodes	C	M

◆Three Input, Six Input Series (Charge pump system)
Brushless motor, Induction motor application

Type	Voltage(V)		Current(A)		Remarks	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN33101SP/SPV/SPR	15	250	1.4	1.0	3-input	S.C	M
ECN33201SP/SPV/SPR	15	500	1.5	0.7	3-input	S.C	M
ECN33202SP/SPV/SPR	15	500	2.0	1.4	3-input	S.C	M
ECN30620F/P/PN	15	600	2.0	1.0	6-input, Embedded high-voltage diodes	C	M
ECN30622F/P/PN	15	600	3.0	2.0	6-input, Embedded high-voltage diodes	C	M

Gate Driver IC (Predriver IC for IGBT or Power MOSFET Drive)

◆VSP Input Series (Charge pump system)
Brushless motor application

Type	Voltage(V)		Current(A)		Remarks	RoHS status	Status
	VCC	VSM	source	sink			
ECN30300S	15	250	top arm 0.10 bottom arm 0.20	top arm 0.25 bottom arm 0.20	Embedded Hall amplifiers	C	M

◆Three Input, Six Input Series (Bootstrap system)
Brushless motor, Induction motor application

Type	Voltage(V)		Current(A)		Remarks	RoHS status	Status
	VCC	VSM	source	sink			
ECN33500FP	15	620	0.25	0.4	3-input, Embedded high-voltage diodes, For sensor type	C	M
ECN33550FP	15	620	0.25	0.4	3-input, Embedded high-voltage diodes, For sensorless type	C	M
ECN30551FP	15	620	0.25	0.4	6-input, Embedded high-voltage diodes	C	M

To be Obsolete

Please ask sales representative in the reference about the substitution version part no.

◆VSP Input Series for driving motor

Type	Voltage(V)		Current(A)		Substitution version part no.	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN30107SP/SPV/SPR	15	250	1.4	1.0	ECN30110F/P	S.C	D
ECN30206SP/SPV/SPR	15	500	1.5	0.7	ECN30210F/P	S.C	D

◆Six Input Series for driving motor

Type	Voltage(V)		Current(A)		Substitution version part no.	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN30603SP/SPV/SPR	15	500	1.5	0.7	ECN30620F/P	S.C	D

Discontinued

Please ask sales representative in the reference about the substitution version part no.

◆VSP Input Series for driving motor

Type	Voltage(V)		Current(A)		Substitution version part no.	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN30105SP/SPV/SPR	15	250	1.8	1.0	ECN30110F/P	S.C	D
ECN30102SP/SPV/SPR	15	250	1.2	0.7	ECN30110F/P	S.C	D
ECN3018SP/SPV/SPR	15	250	1.8	1.0	ECN30110F/P	S.C	D
ECN30108P	15	250	1.4	1.0	ECN30110F/P	S.C	D
ECN30207SP/SPV/SPR	15	500	2.0	1.4	ECN30210F/P	S.C	D
ECN30204SP/SPV/SPR	15	500	1.5	0.7	ECN30210F/P	S.C	D
ECN3021SP/SPV/SPR	15	500	1.0	0.7	ECN30210F/P	S.C	D
ECN3022SP/SPV/SPR	15	500	1.5	0.7	ECN30210F/P	S.C	D
ECN30208P	15	500	1.5	0.7	ECN30210F/P	S.C	D

◆Six Input Series for driving motor

Type	Voltage(V)		Current(A)		Substitution version part no.	RoHS status	Status
	VCC	VSM	Peak	Average			
ECN30611SP/SPV/SPR	15	250	1.4	1.0	ECN30620F/P	S.C	D
ECN3061SP/SPV/SPR	15	250	1.8	1.0	ECN30620F/P	S.C	D
ECN30604SP/SPV/SPR	15	500	2.0	1.4	ECN30622F/P	S.C	D
ECN30601SP/SPV/SPR	15	500	1.5	0.7	ECN30620F/P	S.C	D
ECN3063SP/SPV/SPR	15	500	1.0	0.7	ECN30620F/P	S.C	D
ECN3064SP/SPV/SPR	15	500	1.5	0.7	ECN30620F/P	S.C	D
ECN3067SL/SLV/SLR	15	500	5.0	2.5		–	D
ECN30671SP/SPV/SPR	15	500	3.0	1.5	ECN30622F/P	S.C	D

◆Gate Driver IC (Predriver IC for IGBT or Power MOSFET Drive) for VSP and Six input series

Type	Voltage(V)		Current(A)		Remarks	RoHS status	Status
	VCC	VSM	source	sink			
ECN30301S	15	250	top arm 0.10	top arm 0.25	ECN30300S	C	D
ECN3030F	15	250	top arm 0.05	top arm and bottom arm 0.2	ECN30551FP	C	D
ECN3031F	15	250	bottom arm 0.2		ECN30551FP	C	D
ECN3035F	15	500	top arm 0.05	top arm and bottom arm 0.2	ECN30551FP	C	D
ECN3036F	15	500	bottom arm 0.2		ECN30551FP	C	D
ECN3053F	15	620	0.25	0.5	ECN30551FP	C	D
ECN3054F	15	620	0.25	0.5	ECN30551FP	C	D
ECN30531F	15	620	0.25	0.5	ECN30551FP	C	D
ECN30541F	15	620	0.25	0.5	ECN30551FP	C	D

High Voltage Analog Switch (HVMUX)

◆Ultrasound Imaging System/NDT application

Type	Voltage(V)		Clock (MHz)	Input Signal Range(V)	Analog Switch On Resistance	Channel	Bleed Resistor	PKG	RoHS status	Status
	VDD	VPP-VNN								
ECN3290TF	5	220	10	VNN+10～VPP-10	22Ω(typ.)	8	No	LQFP48	C	M
ECN3292TF	5	220	10	VNN+10～VPP-10	19Ω(typ.)	8	No	LQFP48	C	M
ECN3293TF	3.3/5	220	20	VNN+10～VPP-10	19Ω(typ.)	8	Yes (Both side of SW)	LQFP48	C	M
ECN3294TF	3.3/5	220	20	VNN+10～VPP-10	19Ω(typ.)	8	User selectable (one side of SW)	LQFP48	C	M
ECN3296TF	3.3/5	220	30 @5V 20 @3.3V	VNN～VPP	19Ω(typ.)	16	No	LQFP48	C	M
ECN3297TF	3.3/5	220	30 @5V 20 @3.3V	VNN～VPP	19Ω(typ.)	16	Yes (Both side of SW)	LQFP48	C	M
ECN3298TF	3.3/5	220	30 @5V 20 @3.3V	VNN～VPP	19Ω(typ.)	16	Yes (SW_B side)	LQFP48	C	M

HVMUX (No dedicated high voltage power supplies required)

◆Ultrasound Imaging System/NDT application

Type	VDC (V)	Logic I/F(V)	Clock (MHz)	Input Signal Range(V)	Analog Switch On Resistance	Channel	Bleed Resistor	PKG	RoHS status	Status
ECN32910TF	10～15	3.3/5	30 @5V 20 @3.3V	-100～+100	18Ω(typ.)	16	No	LQFP48	C	M
ECN32911TF	10～15	3.3/5	30 @5V 20 @3.3V	-100～+100	18Ω(typ.)	16	Yes (Both side of SW)	LQFP48	C	M

To be Obsolete

◆Ultrasound Imaging System/NDT application

Type	Voltage(V)		Clock (MHz)	Input Signal Range(V)	Analog Switch On Resistance	Channel	Bleed Resistor	PKG	RoHS status	Status
	VDD	VPP-VNN								
ECN3290PL/FN	5	220	10	VNN+10～VPP-10	22Ω(typ.)	8	No	QFJ28 QFN28	C	D

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