FAIRCHILD SEMICONDUCTOR®

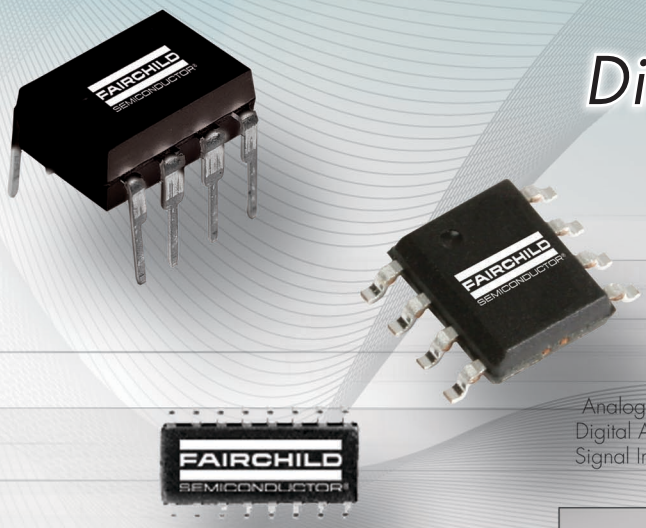
DIGITAL DISPLAY SOLUTIONS

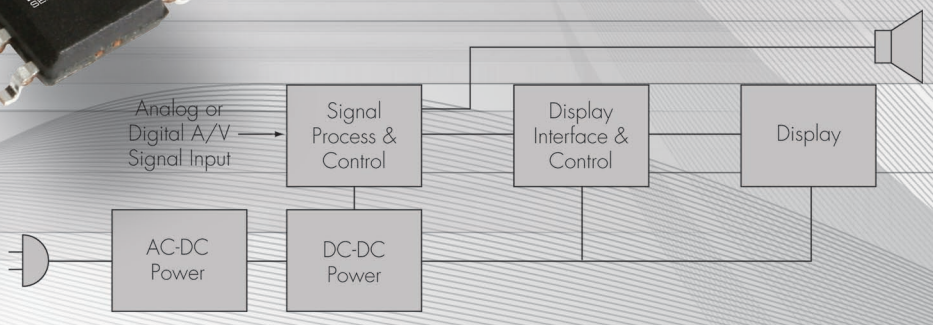
Display Interface and Control

Signal Process and Control

Display Interface and Control

PDP and LCD





Saving our world, 1mW at a time™

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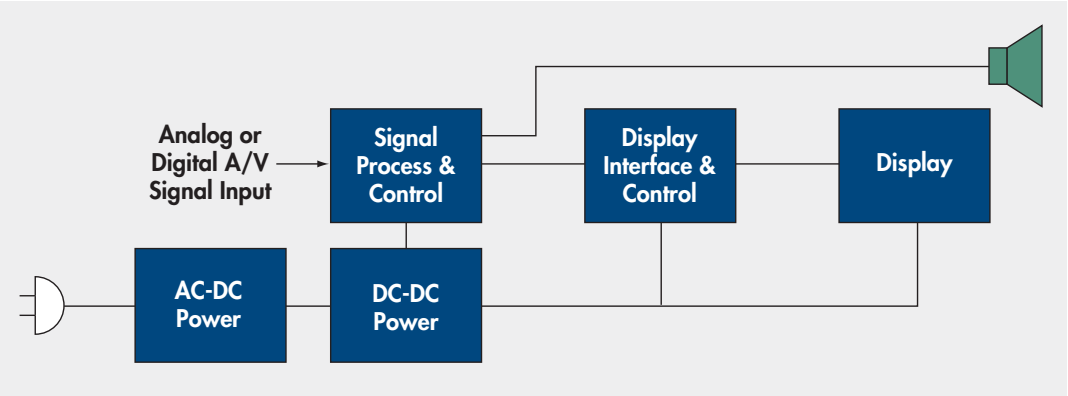
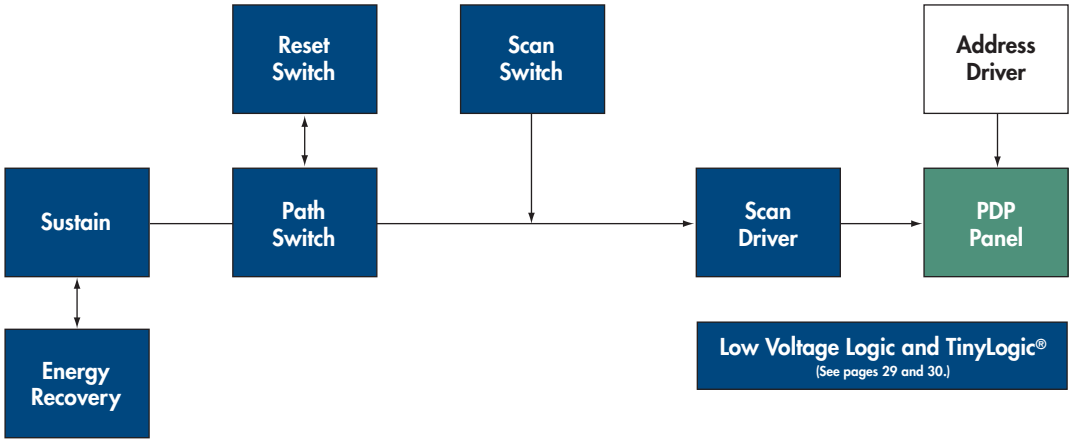
INTRODUCTION

Fairchild offers a wide range of digital display solutions that increase power efficiency and decrease standby power—helping to meet the ever-increasing worldwide demand for energy conservation. Our products can help you meet the most stringent energy regulations including EnergyStar®, 80 Plus® and other standards specified by organizations such as the California Energy Commission (CEC), EU Code of Conduct and Group for Energy Efficient Appliances (GEEA). As a long-time, leading global supplier of high performance semiconductors, Fairchild can help you solve system design challenges with the most efficient, reliable portfolio in the industry. From display interface and control, to power supplies and signal process and control, if energy efficiency, system size and system cost are important for your digital display designs, Fairchild has the solutions.



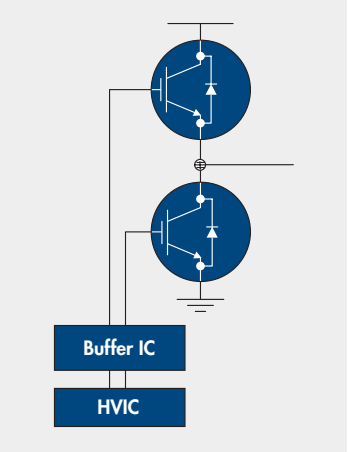
Display System Block Diagram
All Fairchild products are indicated in blue.



Sustain

IGBTs

Product Number	BV_{CES} Min. (V)	I_C @ 25°C (A)	$V_{CE(SAT)}$ Typ. (V)	Q_G Typ. (nC)	Package
FGPF70N30	300	170	1.8	71	TO-220F
FGP90N30	300	220	1.9	87	TO-220
FGPF90N30	300	220	1.9	93	TO-220F
FGA90N30	300	220	1.9	87	TO-3P
FGA90N30D	300	220	1.9	87	TO-3P CO-PAK
FGPF120N30	300	300	1.9	112	TO-220F
FGA120N30D	300	300	1.9	120	TO-3P CO-PAK
FGPF70N30T	300	160	1.5	125	TO-220F
FGPF70N30TD	300	160	1.5	125	TO-220F CO-PAK
FGA180N30D	300	450	1.9	185	TO-3P CO-PAK



Sustain Block Diagram

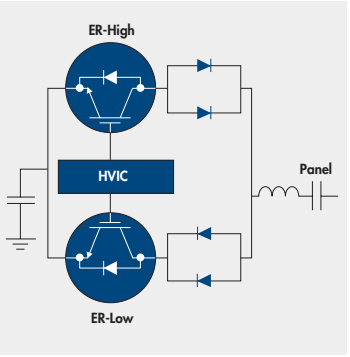
High Voltage Gate Drivers

Product Number	Circuit		Offset Voltage (V)	Output Current (mA)		Delay Time (ns)		Shut Down	Dead Time Control	Quiescent Current (µA)		dv/dt (V/ns)	V_B (V)	Package
	Type	Input to Output		Source	Sink	t_{ON}	t_{OFF}			I_{QBS}	I_{QCC}			
FAN7382	High & low side	2 - 2	600	350	650	170	200	No	Fixed	45	70	50	–9.8	SOP-8, DIP-8, SOP-14
FAN7361	High side	1 - 1	600	250	500	120	90	No	No	50	30	50	–9.8	SOP-8
FAN7371	High side	1 - 1	600	4000	4000	150	150	No	No	65	25	50	–9.8	SOP-8

Energy Recovery

IGBTs

Product Number	BV_{CES} Min. (V)	I_C @ 25°C (A)	$V_{CE(SAT)}$ Typ. (V)	Q_G Typ. (nC)	Package
FGPF30N30	300	80	1.8	39	TO-220F
FGPF70N30	300	170	1.8	71	TO-220F
FGP90N30	300	220	1.9	87	TO-220
FGPF90N30	300	220	1.9	93	TO-220F
FGA90N30	300	220	1.9	87	TO-3P
FGA90N30D	300	220	1.9	87	TO-3P CO-PAK
FGPF30N30D	300	80	1.8	–	TO-220 CO-PAK
FGPF30N30T	300	80	1.4	65	TO-220F
FGPF30N30TD	300	80	1.4	65	TO-220F CO-PAK
FGPF120N30	300	300	1.9	112	TO-220F
FGA120N30D	300	300	1.9	120	TO-3P CO-PAK
FGPF70N30T	300	170	1.8	–	TO-220F



Energy Recovery Block Diagram

Fast Recovery Diodes

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} Max. (V)	t_{rr} Max. (ns)	I_{RM} Max. (µA)	Package
FFA30UP20DN	200	15	150	1.15	45	100	TO-3P (2 Chip)
FFA40UP20DN	200	20	200	1.15	45	100	TO-3P (2 Chip)
FFAF40UP20DN	200	20	200	1.15	45	100	TO-3PF (2 Chip)
FFA60UP20DN	200	30	300	1.15	50	100	TO-3P (2 Chip)
FFB10UP20S	200	10	100	1.15	45	100	TO-263 (D^2PAK)
FFB20UP20S	200	20	200	1.15	45	100	TO-263 (D^2PAK)
FFP12UP20DN	200	6	60	1.15	35	100	TO-220 (2 Chip)
FFP20UP20DN	200	10	100	1.15	45	100	TO-220 (2 Chip)
FFP30UP20DN	200	15	150	1.15	45	100	TO-220 (2 Chip)
FFPF06UP20S	200	6	60	1.15	35	100	TO-220F
FFPF10UP20S	200	10	100	1.15	45	100	TO-220F
FFPF12UP20DN	200	6	60	1.15	35	100	TO-220F (2 Chip)
FFPF12UP20DP	200	6	60	1.15	35	100	TO-220F (2 Chip)
FFPF15UP20S	200	15	150	1.15	45	100	TO-220F
FFPF20UP20DN	200	10	100	1.15	45	100	TO-220F (2 Chip)
FFPF20UP20DP	200	10	100	1.15	45	100	TO-220F (2 Chip)
FFPF20UP20S	200	20	200	1.15	45	100	TO-220F
FFPF30UP20DN	200	15	150	1.15	45	100	TO-220F (2 Chip)
FFPF30UP20DP	200	15	150	1.15	45	100	TO-220F (2 Chip)
FFPF30UP20S	200	30	300	1.15	50	100	TO-220F
FFA60UP30DN	300	30	300	1.5	55	100	TO-3P (2 Chip)

High Voltage Gate Drivers

Product Number	Circuit		Offset Voltage (V)	Output Current (mA)		Delay Time (ns)		Shut Down	Dead Time Control	Quiescent Current (µA)		dv/dt (V/ns)	V_B (V)	Package
	Type	Input to Output		Source	Sink	t_{ON}	t_{OFF}			I_{QBS}	I_{QCC}			
FAN7361	High side	1 - 1	600	250	500	120	90	No	No	50	30	50	–9.8	SOP-8
FAN7385	2 channel high side	2 - 2	600	350	650	110	110	No	No	50	28	50	–9.8	SOP-14
FAN7371	High side	1 - 1	600	4000	4000	150	150	No	No	65	25	50	–9.8	SOP-8

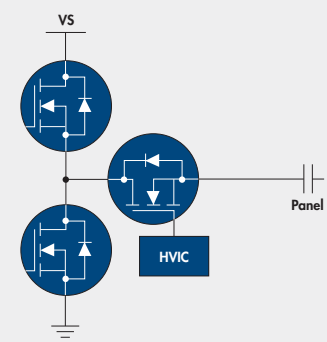
Path Switch

High Voltage Gate Drivers

Product Number	Circuit		Offset Voltage (V)	Output Current (mA)		Delay Time (ns)		Shut Down	Dead Time Control	Quiescent Current (µA)		dv/dt (V/ns)	V_B (V)	Package
	Type	Input to Output		Source	Sink	t_{ON}	t_{OFF}			I_{QBS}	I_{QCC}			
FAN7361	High side	1 - 1	600	250	500	120	90	No	No	50	30	50	–9.8	SOP-8
FAN7385	2 channel high side	2 - 2	600	350	650	110	110	No	No	50	28	50	–9.8	SOP-14
FAN7371	High side	1 - 1	600	4000	4000	150	150	No	No	65	25	50	–9.8	SOP-8

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FDP61N20	N	Single	200	0.041	58	61	417	TO-220
FDB2614	N	Single	200	0.027	87	62	260	TO-263 (D^2PAK)
FDB52N20	N	Single	200	0.049	49	52	357	TO-263 (D^2PAK)
FDPF39N20	N	Single	200	0.066	38	39	59	TO-220F
FQD16N25C	N	Single	250	0.27	41	16	160	TO-263 (D^2PAK)
FDB44N25	N	Single	250	0.069	47	44	307	TO-263 (D^2PAK)
FDPF44N25	N	Single	250	0.069	47	18	56	TO-220F
FDA59N25	N	Single	250	0.049	63	59	392	TO-3P
FDB33N25	N	Single	250	0.094	37	33	235	TO-263 (D^2PAK)
FDB2710	N	Single	250	0.0425	78	50	260	TO-263 (D^2PAK)
FDA69N25	N	Single	250	0.041	77	69	480	TO-3P
FDAF69N25	N	Single	250	0.041	77	34	115	TO-3PF
FDA2712	N	Single	250	0.034	99	64	357	TO-3PN
FDPF51N25	N	Single	250	0.060	55	28	117	TO-220F
FDA62N28	N	Single	280	0.051	77	62	500	TO-3P
FDAF62N28	N	Single	280	0.051	77	36	165	TO-3PF
FDA75N28	N	Single	280	0.040	111	75	520	TO-3P
FDAF75N28	N	Single	280	0.040	111	46	215	TO-3PF

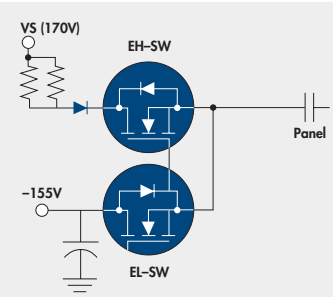


Path Switch Block Diagram

Reset Switch/Ramp

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	Maximum Rating		Package
						Number	P_D (W)	
FDA20N50	N	Single	500	0. 23	46	22	280	TO-3P
FDA18N50	N	Single	500	0. 265	45	19	239	TO-3P
FQA7N65C	N	Single	650	1.4	28	7	173	TO-3P
FQB7N65C	N	Single	650	1.4	28	7	173	TO-263 (D^2PAK)
FDA15N65	N	Single	650	0.44	49	16	260	TO-3P

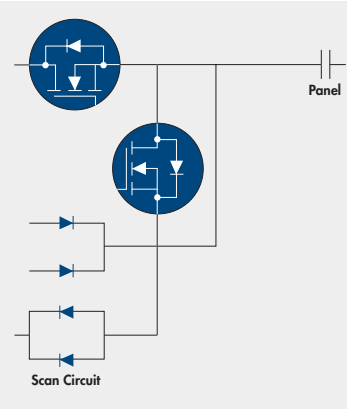


Reset Switch/Ramp Block Diagram

Scan Switch

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS}=10V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FDP61N20	N	Single	200	0.041	58	61	417	TO-220
FDB2614	N	Single	200	0.027	72	62	260	TO-263 (D^2PAK)
FDB52N20	N	Single	200	0.049	49	52	357	TO-263 (D^2PAK)
FDPF39N20	N	Single	200	0.066	38	39	59	TO-220F
FQD16N25C	N	Single	250	0.27	41	16	160	TO-263 (D^2PAK)
FDB44N25	N	Single	250	0.069	47	44	307	TO-263 (D^2PAK)
FDPF44N25	N	Single	250	0.069	47	18	56	TO-220F
FDA59N25	N	Single	250	0.049	63	59	392	TO-3P
FDB33N25	N	Single	250	0.094	37	33	235	TO-263 (D^2PAK)
FDB2710	N	Single	250	0.0425	84	50	260	TO-263 (D^2PAK)
FDA69N25	N	Single	250	0.041	77	69	480	TO-3P
FDAF69N25	N	Single	250	0.041	77	34	115	TO-3PF
FDA2712	N	Single	250	0.0292	99	64	357	TO-3P
FDPF51N25	N	Single	250	0.06	55	28	117	TO-220F

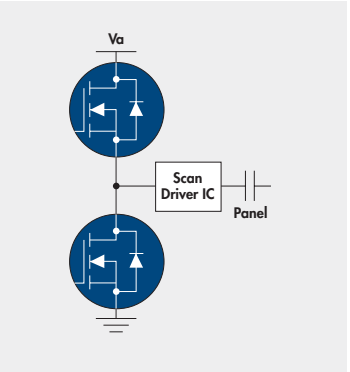


Scan Switch Block Diagram

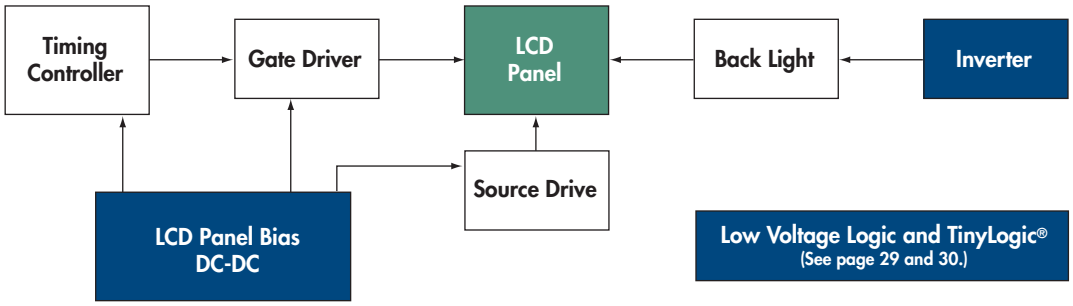
Scan Driver

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FQD13N10	N	Single	100	0.18	12	10	40	TO-252 (DPAK)
FQD19N10	N	Single	100	0.1	19	15.6	50	TO-252 (DPAK)
FDD3672	N	Single	100	0.028	24	44	135	TO-252 (DPAK)
FDD3682	N	Single	100	0.036	18.5	32	95	TO-252 (DPAK)
FQD14N15	N	Single	150	0.21	18	10	50	TO-252 (DPAK)
FQD16N15	N	Single	150	0.16	23	11.8	55	TO-252 (DPAK)
FDD2572	N	Single	150	0.054	26	29	135	TO-252 (DPAK)
FDD2582	N	Single	150	0.066	19	21	95	TO-252 (DPAK)



Scan Driver Block Diagram



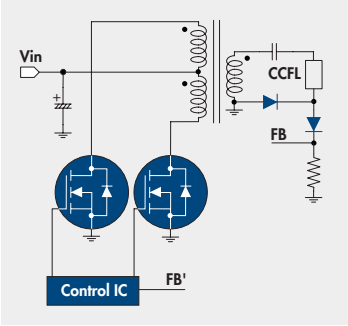
Inverter (Push-pull Type)

LCD Backlight Inverter Drive ICs

Product Number	Topology	Operating Voltage (V)	On/Off Control	Soft-start	Dimming	Striking Frequency	OLP	OLR	Output Swing Voltage Max. (V)	Output Current Max. (A)	Package
FAN7314	Half-bridge	5 - 25.5	Yes	Yes	Analog & burst	Yes	Yes	Yes	8.5	0.2	SOP-20
FAN7313	Push-pull	4.5 - 25.5	Yes	Yes	Analog & burst	Yes	Yes	Yes	6	0.5	SOP-20

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 5V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FDS5672	N	Single	60	0.01	34	12	2.5	SO-8
FDD5810	N	Single	60	0.02	24	35	88	TO-252 (DPAK)
FDS5682	N	Single	60	0.021	27	7.5	2.5	SO-8
FQB20N06L	N	Single	60	0.06	11.5	20	53	TO-263 (D^2PAK)
FQD20N06	N	Single	60	0.063	11.5	16.8	38	TO-252 (DPAK)
FDD3672	N	Single	100	0.028	24	44	135	TO-252 (DPAK)
FDD3682	N	Single	100	0.036	18.5	32	95	TO-252 (DPAK)
FQB33N10	N	Single	100	0.052	38	33	127	TO-263 (D^2PAK)
FQD19N10	N	Single	100	0.1	19	15.6	50	TO-252 (DPAK)
HUF76609D3S	N	Single	100	0.16	13	10	49	TO-252 (DPAK)
FQD13N10	N	Single	100	0.18	12	10	40	TO-252 (DPAK)
FQD7N10	N	Single	100	0.35	5.8	5.8	25	TO-252(DPAK)



Inverter Block Diagram

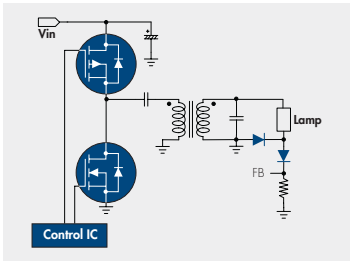
Small Signal Diodes

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} Max. (V)	t_{rr} Max. (ns)	I_{RM} Max. (μA)	Package
BAV99	70	0.6	1	1	2.5	6	SOT-23
BAW56	85	0.6	1	1	2.5	6	SOT-23

Inverter (Half and Full-bridge Type)

LCD Backlight Inverter Drive ICs

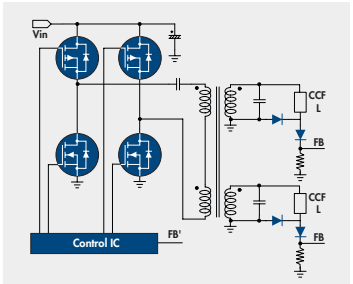
Product Number	Topology	Operating Voltage (V)	On/Off Control	Soft-start	Dimming	Striking Frequency	OLP	OLR	Output Swing Voltage Max. (V)	Output Current Max. (A)	Package
FAN7314	Half-bridge	5 - 25.5	Yes	Yes	Analog & burst	Yes	Yes	Yes	8.5	0.2	SOP-20
FAN7310	Full-bridge	5 - 24	Yes	Yes	Analog & burst	No	Yes	Yes	8.5	0.2	SSOP-20
FAN7311/ A/B	Full-bridge	5 - 25.5	Yes	Yes	Analog & burst	No	Yes	Yes	8.5	0.2	SOP-20, SSOP-20
FAN7315	Full-bridge	7 - 20	Yes	Yes	Analog & burst	No	Yes	Yes	5.5	0.2	SSOP-20
FAN7316	Half-bridge	4.5 - 24	Yes	Yes	Analog & burst	Yes	Yes	Yes	6	0.5	SOP-20



Inverter (Half-bridge Type) Block Diagram

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 4.5V	Q_G Typ. (nC) @ V_{GS} = 5V	Maximum Rating I_D (A)	Maximum Rating P_D (W)	Package
FDS8978	N	Dual	30	0.018	0.021	9	7.5	1.6	SO-8
FDS8984	N	Dual	30	0.028	0.030	5	7	1.6	SO-8
FDD8880	N	Single	30	0.009	–	23	58	55	TO-252 (DPAK)
FDS8878	N	Single	30	0.014	0.017	17	10.2	2.5	SO-8
FDS8962C	N/P	Complementary	30/–30	0.03/ 0.052	0.044/ 0.08	10.7/9.6	7/5	2	SO-8
FDS8958A	N/P	Complementary	30/–30	0.028/ 0.052	0.04/ 0.08	10.7/9.6	7/5	2	SO-8
FDS4953	P	Dual	–30	0.055	0.095	6	5	2	SO-8
FDD6685	P	Single	–30	0.02	0.03	17	40	52	TO-252 (DPAK)
FDS4435BZ	P	Single	–30	0.02	0.035	16.5	8.8	2.5	SO-8
FDD6635	N	Single	35	0.01	0.013	13	59	55	TO-252 (DPAK)
FDD6637	P	Single	–35	0.0116	0.018	45	55	57	TO-252 (DPAK)
FDS8949	N	Dual	40	0.029	0.036	7.7	6	2	SO-8
FDS4470	N	Single	40	0.009	–	45	12.5	2.5	SO-8
FDS4672A	N	Single	40	–	0.013	35	11	2.5	SO-8
FDS8449	N	Single	40	0.029	0.036	7.7	7.6	2.5	SO-8
FDD8445	N	Single	40	0.009	–	52	75	90	TO-252 (DPAK)
FDS8447	N	Single	40	0.0105	0.0123	19	12,8	2.5	SO-8
FDD8447L	N	Single	40	0.0085	0.011	37	54	45	TO-252 (DPAK)
FDD8451	N	Single	40	0.024	0.03	14	28	37	TO-252 (DPAK)
FDS4885C	N/P	Complementary	40/–40	0.022/ 0.035	–	15/29	7.5/6	2	SO-8
FDS4895C	N/P	Complementary	40/–40	0.039/ 0.046	–	7/20	5.5/4	2	SO-8
FDS4897C	N/P	Complementary	40/–40	0.029/ 0.046	0.036/ 0.063	14/20	6.2/ 4.4	2	SO-8
FDD8424H	N/P	Complementary	40/–40	0.024/ 0.054	0.30/ 0.070	14/17	20/20	30/35	TO-252 (DPAK)
FDD4243	P	Single	–40	0.044	0.064	21	6.7	42	TO-252 (DPAK)
FDS4675	P	Single	–40	0.013	0.017	40	11	2.4	SO-8
FDS4685	P	Single	–40	0.027	0.035	19	8,2	2.5	SO-8
FDD4685	P	Single	–40	0.027	0.035	19	32	69	TO-252 (DPAK)
FDS4559	N/P	Complementary	60/–60	0.055/ 0.105	0.075/ 0.135	12.5/15	4.5/ 3.5	2	SO-8

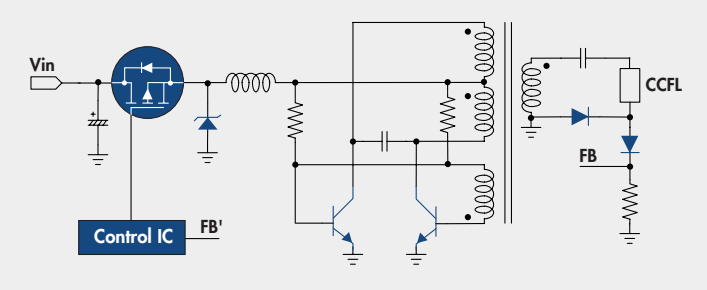


Inverter (Full-bridge Type) Block Diagram

Small Signal Diodes

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} Max. (V)	t_{rr} Max. (ns)	I_{RM} Max. (µA)	Package
BAV99	70	0.6	1	1	2.5	6	SOT-23
BAW56	85	0.6	1	1	2.5	6	SOT-23

Inverter (Buck-royer Type)



Inverter (Buck-royer Type) Block Diagram

LCD Backlight Inverter Drive ICs

Product Number	Topology	Operating Voltage (V)	On/Off Control	Soft-start	Dimming	Striking Frequency	OLP	OLR	Output Swing Voltage Max. (V)	Output Current Max. (A)	Package
FAN7547A	Buck-royer	6 - 30	Yes	Yes	Analog & burst	No	Yes	Yes	V_{CC}	0.2	SOP-14
FAN7548	Buck-royer	9 - 30	Yes	Yes	Analog & burst	No	Yes	Yes	13.5	0.2	SSOP-20

Small Signal Transistors

Product Number	V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE}				Saturation Voltage			Package
					Min.	Max.	@ V_{CE} (V)	@ I_C (mA)	$V_{CE(SAT)}$ Max. (V)	@ I_C (mA)	@ I_B (mA)	
NZT560	60	80	5	3	100	300	2	500	0.45	3000	300	SOT-223
KST3904	40	60	6	0.2	100	300	1	10	0.3	50	5	SOT-23
FJC2098	20	50	6	5	120	390	2	500	1	4	100	SOT-89
FJC690	45	45	5	2	500	–	2	100	0.08	100	0.5	SOT-89

MOSFETs

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω)		Q_G Typ. (nC) @ V_{GS} = 5V	Maximum Rating		Package
				@ V_{GS} = 10V	@ V_{GS} = 4.5V		I_D (A)	P_D (W)	
FDC654P	P	Single	–30	0.075	0.125	6.2	3.6	1.6	SSOT-6
FDC658PAP	P	Single	–30	0.05	0.075	6	4	1.6	SSOT-6

Schottky Diodes								
Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	$R_{\theta JC}$ (°C/W)	V_{FM} Max. (V)	I_{RM}		Package
						(µA)	@ V_R (V)	
SS23	30	2	50	–	0.5	400	30	SMB
SS26	60	2	50	–	0.7	400	60	SMB
SS33	30	3	100	17	0.5	500	30	SMC
SS36	60	3	100	17	0.75	500	60	SMC

Small Signal Diodes							
Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} Max. (V)	t_{rr} Max. (ns)	I_{RM} Max. (µA)	Package
BAV99	70	0.6	1	1	2.5	6	SOT-23
BAW56	85	0.6	1	1	2.5	6	SOT-23

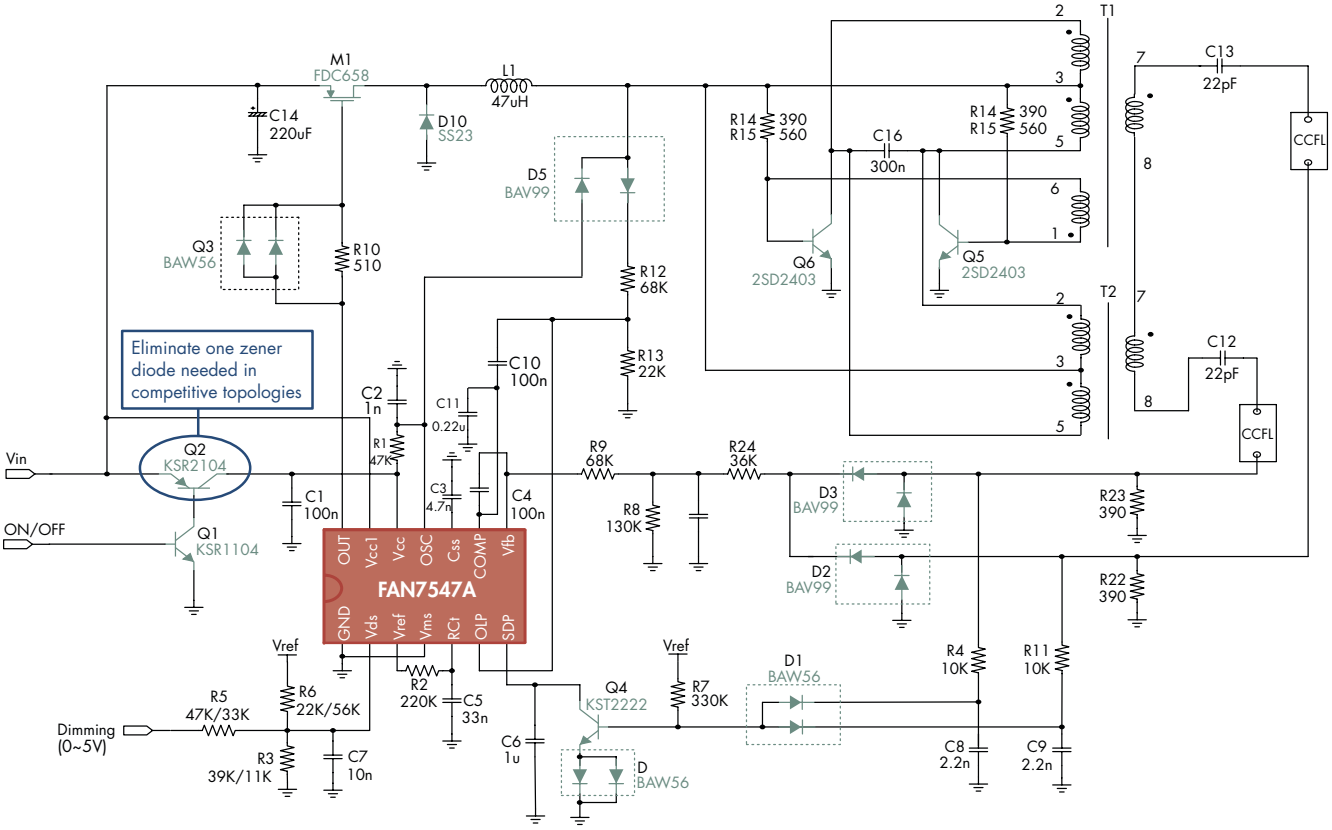
LCD Panel Bias DC-DC

General Purpose Amplifiers														
Product Number	Number of Amps	Power Down	CMIR Incl. Rail	RRIO	GBWP[1] (MHz)	SR (V/µs)	I_S[2] (mA)	I_{OUT} (mA)	V_{IO} (mV)	I_b (µA)	A_{OL} (dB)	V_S Min. (V)	V_S Max. (V)	Package
LMV321	1	No	Yes	No	1.4	2	0.1	+34, –23	1	10^{-3}	70	2.5	5.5	SOT-23-5, SC70-5
LMV358	2	No	Yes	No	1.4	2	0.1	+34, –23	1	10^{-3}	70	2.5	5.5	SOIC-8, MSOP-8
LMV324	4	No	Yes	No	1.4	2	0.1	+34, –23	1	10^{-3}	70	2.5	5.5	SOIC-14, TSSOP-14
FAN4174	1	No	Yes	Both	3.7	3	0.2	+34, –12	0	$5x10^{-6}$	102	2.5	5.5	SOT-23-5, SC70-5
FAN4274	2	No	Yes	Both	3.7	3	0.2	+34, –12	0	$5x10^{-6}$	102	2.5	5.5	MSOP-8
FHP3130	1	No	Yes	Output	60	110	2.5	±100	1	–1.8	100	2.7	12	SOT-23-5, SOIC-8
FHP3430	4	No	Yes	Output	60	110	2.5	±100	1	–1.8	100	2.7	12	TSSOP-14, SOIC-14

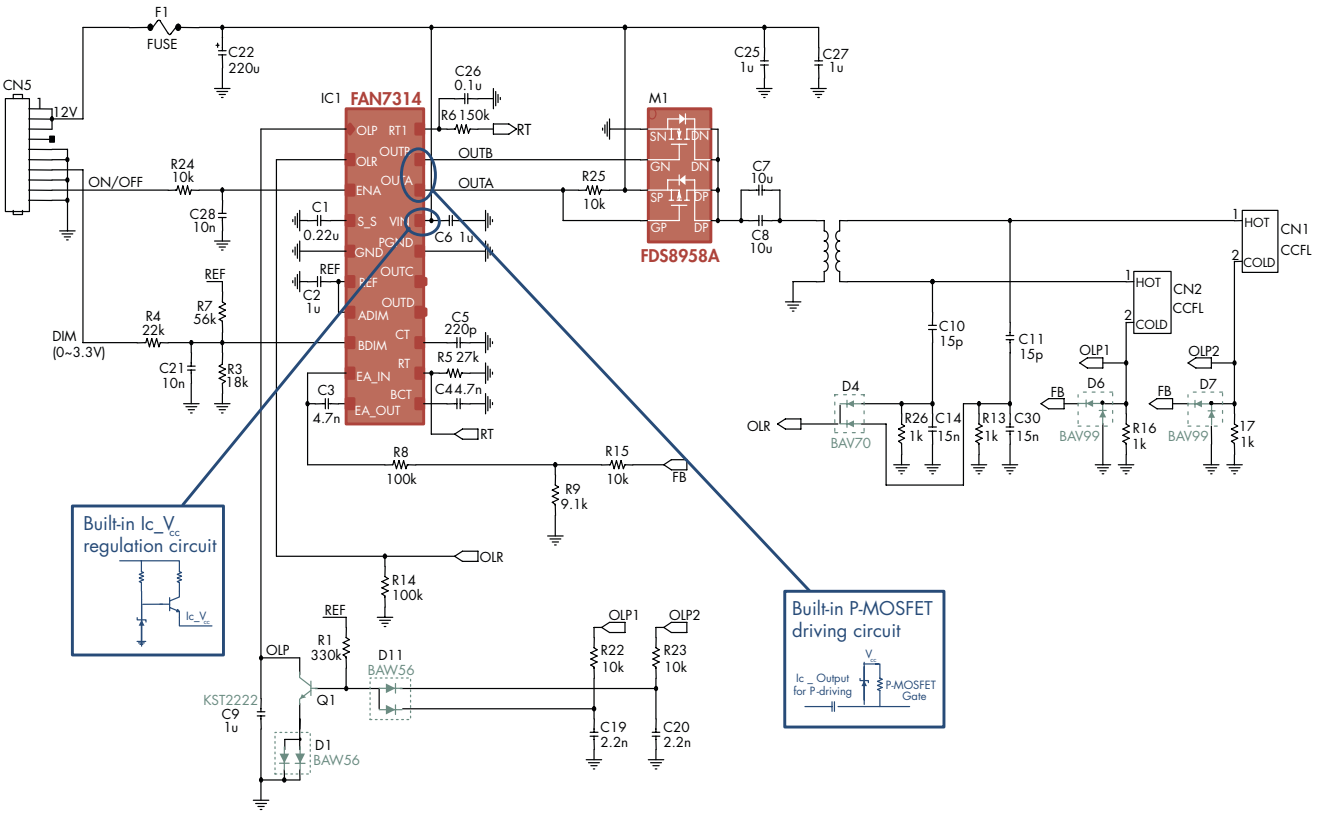
Note[1] Gain bandwidth product

Note[2] Supply current per channel temperature range for all devices: -40°C or +85°C

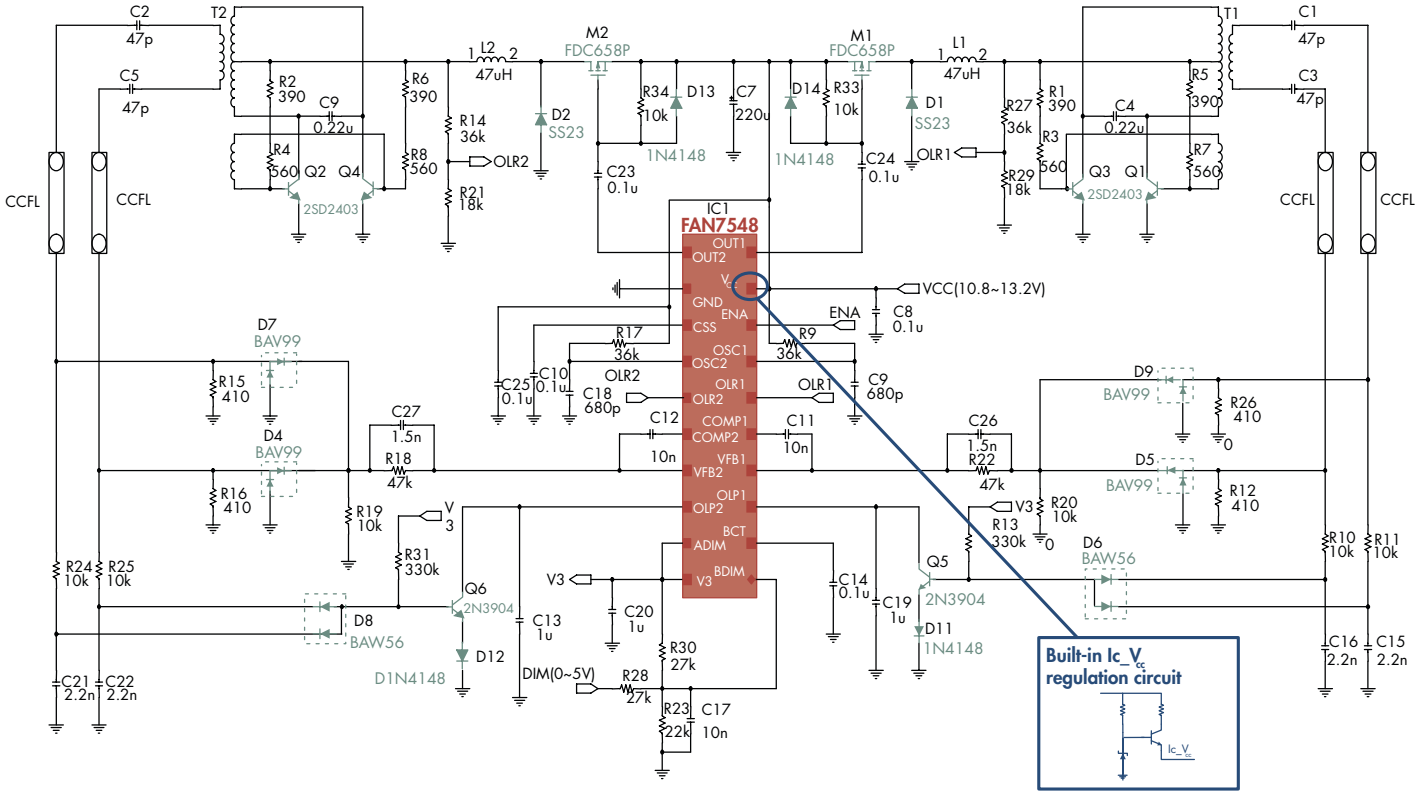
2 Lamps Single Channel Buck-royer Circuit Using FAN7547A



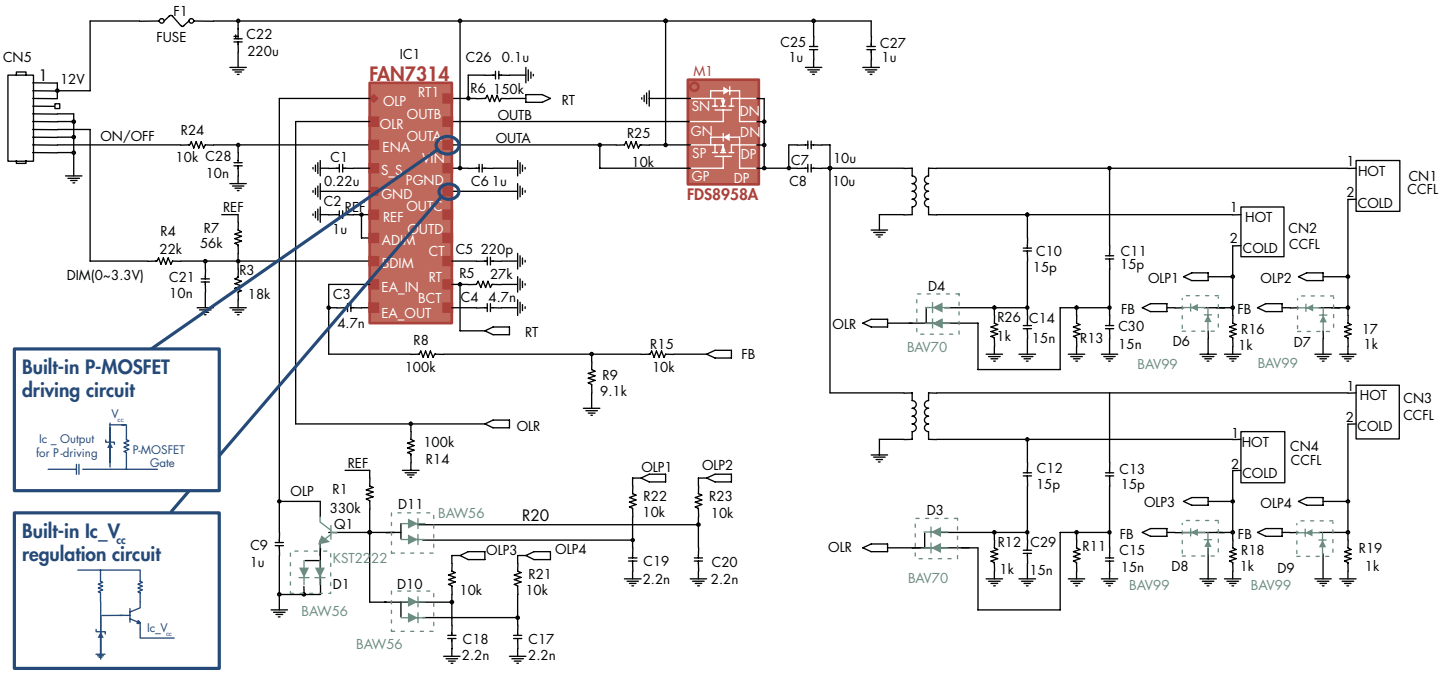
2 Lamps P–N Half-bridge Circuit Using FAN7314



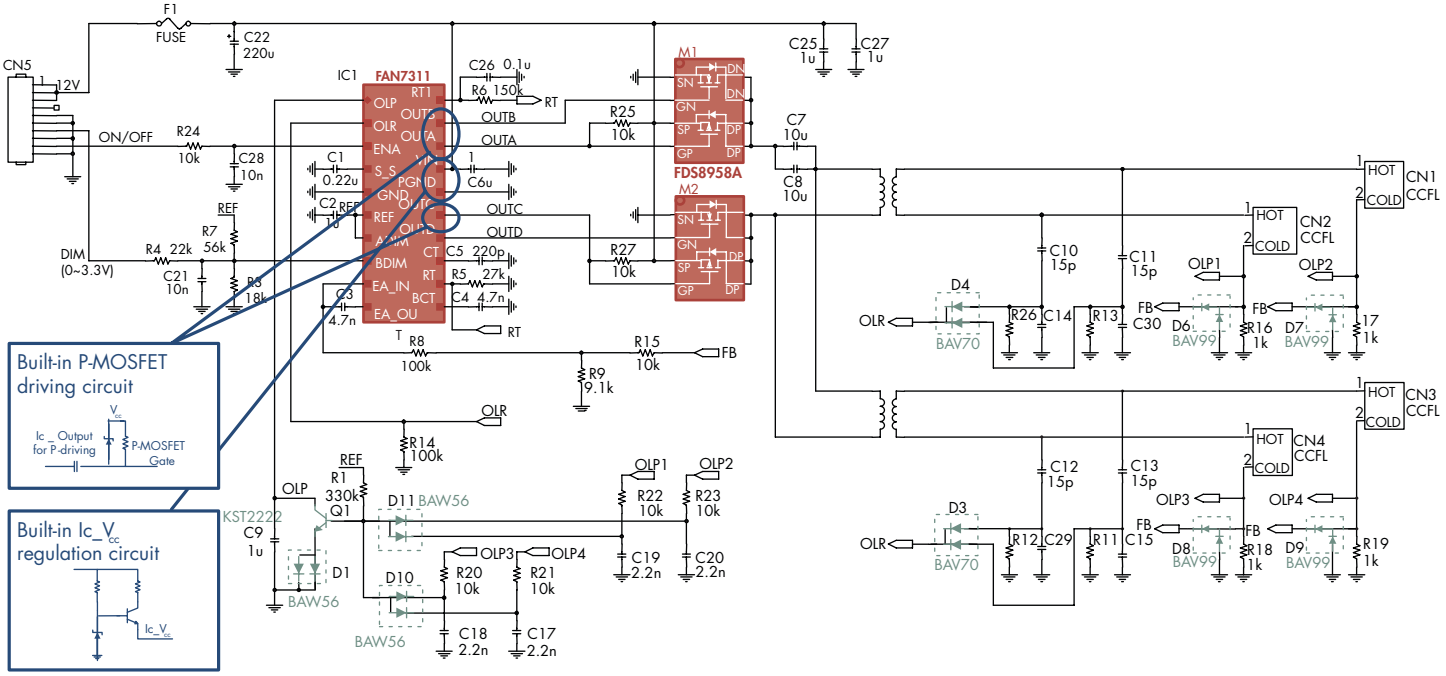
4 Lamps Dual Channel Buck-royer Circuit Using FAN7548



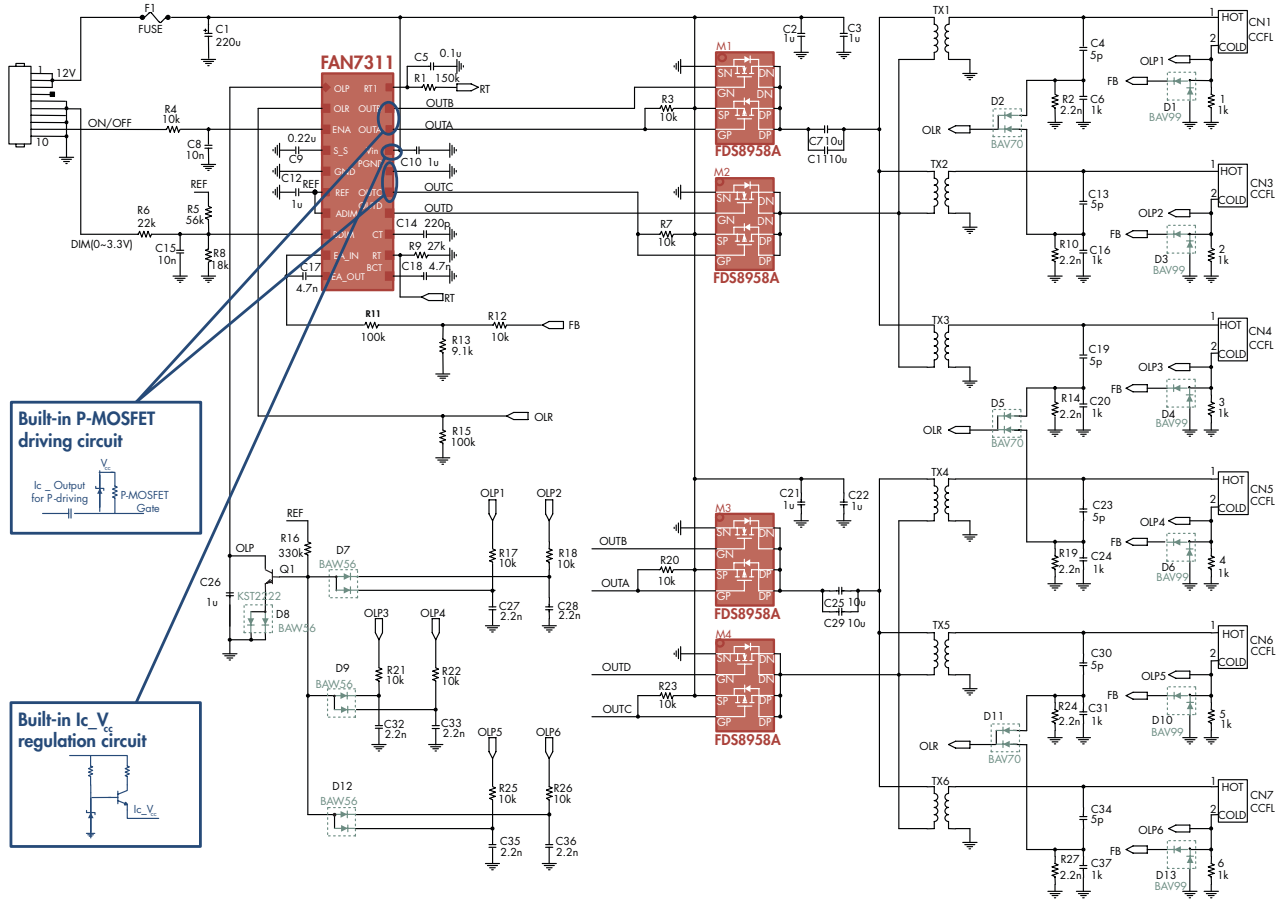
4 Lamps P–N Half-bridge Circuit Using FAN7314



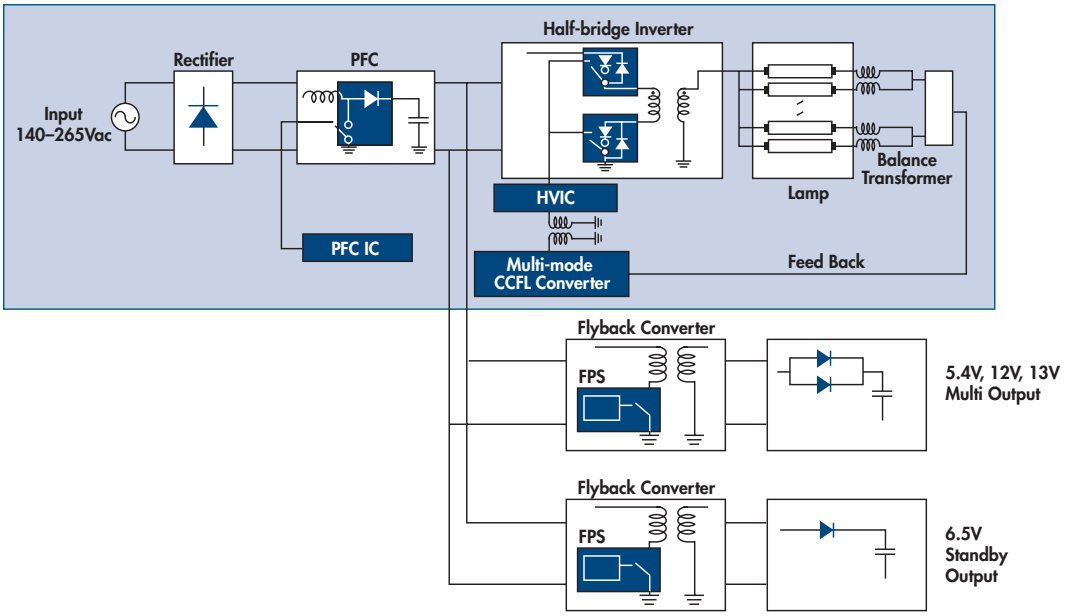
4 Lamps P–N Full-bridge Circuit Using FAN7311



6 Lamps Circuit Using FAN7311



LCD TV HIGH VOLTAGE BACKLIGHTING UNIT



Product Portfolio

LCD TV (inch)	PFC				DC-DC Converter FPS or PWM IC	Stand-by FPS or PWM IC	Secondary Diode	Backlighting Unit (Half-bridge)			
	Topology	MOSFET	Diode	Control IC				MOSFET	Blocking Diode/FRD	HVIC	Control IC
32″	DCM	FQP13N50C FQPF13N50C FQA13N50C FQP9N50C FQPF9N50C FQP12N60C FQPF12N60C FQP10N60C FQPF10N60C FQA10N60C FDP12N50 FDPF12N50T FCP11N60 FCPF11N60	FFP08H60S FFPF08H60S	FAN7529 FAN7530	FAN7602C FSQ0465RB	FSQ0170RNA FSQ0270RNA FSQ0370RNA	FFPF12UP20DN	FQPF5N50CF		FAN7382	FAN7313
37″~ 42″	DCM	FDP18N50 FDPF18N50 FDA18N50	FFPF10UP60S FFPF10H60S	FAN7529 FAN7530	FAN7602C FSQ0465RB	FSQ0170RNA FSQ0270RNA FSQ0370RNA FAN7601 FAN7602B	FFPF20UP20DN	FDPF7N50 FQPF9N50CF FDPF12N50T FQPF13N50C FQPF13N50CF FQPF8N60C FQPF10N60C FQPF12N60C	ISL9R460PF2 FFPF04H60S FFPF04S60S	FAN7382	FAN7313
	CCM	FDP18N50 FDPF18N50 FDA18N50 FDP20N50 FDPF20N50 FDA20N50 FCP16N60 FCPF16N60 FCA16N60	FFP08H60S FFPF08H60S FFPF10H60S ISL9R860P2 ISL9R860PF2 FFP15S60S FFPF15S60S FFH15S60S	FAN4810	FAN7602C FSQ0465RB	FSQ0170RNA FSQ0270RNA FSQ0370RNA FAN7601 FAN7602B	FFPF20UP20DN				
46″~ 50″	CCM	FCP20N60 FCPF20N60 FCA20N60	ISL9R1560P2 ISL9R1560PF2 ISL9R1560G2 FFP15S60S FFPF15S60S FFH15S60S	FAN4810	FAN7602C FSQ0565RQ FSQ0465RB	FSQ0170RNA FSQ0270RNA FSQ0370RNA FAN7601 FAN7602B	FFPF20UP20DN	FDPF16N50 FDPF18N50 FDA18N50 FDPF20N50 FDA20N50 FCPF11N60 FCPF16N60 FCA16N60 FCPF20N60 FCA20N60	ISL9R860PF2 FFPF08H60S FFPF08S60S FFPF60SA60DS	FAN7382	FAN7313

LCD Backlight Inverter Drive ICs

Product Number	Topology	Operating Voltage (V)	On/Off Control	Soft-start	Dimming	Striking Frequency	OLP	OLR	Output Swing Voltage Max. (V)	Output Current Max. (A)	Package
FAN7313	Push-pull	4.5 - 25.5	Yes	Yes	Analog & burst	Yes	Yes	Yes	6	0.5	SOP-20

High Voltage Gate Drivers

Product Number	Circuit		Offset Voltage (V)	Output Current (mA)		Delay Time (ns)		Shut Down	Dead Time Control	Quiescent Current (µA)		dv/dt (V/ns)	V_B (V)	Package
	Type	Input to Output		Source	Sink	t_{ON}	t_{OFF}			I_{QBS}	I_{QCC}			
FAN7382	High & low side	2 - 2	600	350	650	170	200	No	No	45	70	50	–9.8	SOP-8, DIP-8, SOP-14

FPS™ (Fairchild Power Switches)

Product Number	Drain Voltage Max. (V)	Static Drain-Source On-Resistance Max. (Ω)	Peak Current Limit (A)	Output Power Max.		Switching Frequency (kHz)	Protections				Package
				@ 85-265 V_{AC} (W)	@ 230 V_{AC} (W)		Over Current	Over Load	Over Voltage	Thermal Shutdown	
FSGM0465R	650	2.6	1.8	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0465RB	650	2.6	2.7	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0465RS	650	2.6	3.0	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0565R	650	2.2	2.2	60	80	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0565RB	650	2.2	3.0	70	80	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0765R	650	1.6	2.6	70	90	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSQ0170RNA	700	11	0.8	13	20	100	No	Auto restart	Auto restart	Auto restart	DIP
FSQ0270RNA	700	7.2	0.9	16	24	100	No	Auto restart	Auto restart	Auto restart	DIP
FSQ0370RNA	700	4.75	1.1	19	27	100	No	Auto restart	Auto restart	Auto restart	DIP
FSL136MR	650	4	2.15	20	26	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL126MR	650	6	1.5	17	21	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL116LR	650	10	1.2	14	16	50	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL106HR	650	19	0.75	10	13	100	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL106MR	650	19	0.58	8	10	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP

Output Short specification for all FPS products is auto restart

PFC Controllers

Product Number	PFC Control	Startup Current (µA)	Operating Current (mA)	Drive Out (A)	UVLO (V)	Package
FAN7530	Discontinuous (Transition)	40	1.5	0.5	12/8.5	DIP, SOIC
FAN7529	Discontinuous (Transition)	40	1.5	0.5	12/8.5	DIP, SOIC
FAN4810	Average Current	200	5.5	1	13/10	DIP, SOIC

PWM Controllers

Product Number	Number of Outputs	Control Mode	Switching Frequency (kHz)	Supply Voltage Max. (V)	Output Current Max. (A)	Duty Ratio (%)	Startup Current (µA)	Package
FAN7601B	1	Current	Progammable up to 300	20	0.25	98	1000	8DIP, 8SOIC, 10SSOP
FAN7602C	1	Current	65	25	0.45	75	250	8DIP, 8SOIC

MOSFETs

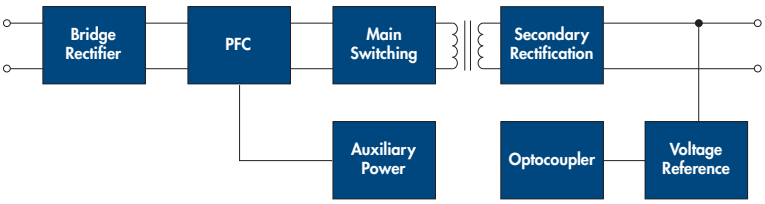
Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 10V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FDP20N50	N	Single	500	0.23	45.6	20	250	TO-220
FDPF20N50	N	Single	500	0.23	45.6	20	62	TO-220F
FDA20N50	N	Single	500	0.23	45.6	22	280	TO-3P
FDP18N50	N	Single	500	0.265	45	8	235	TO-220
FDPF18N50	N	Single	500	0.265	45	8	58	TO-220F
FDA18N50	N	Single	500	0.265	45	19	239	TO-3PN
FDPF16N50	N	Single	500	0.38	32	16	52	TO-220F
FQP13N50C	N	Single	500	0.48	43	13	195	TO-220
FQPF13N50C	N	Single	500	0.48	43	13	48	TO-220F
FQA13N50C	N	Single	500	0.48	43	13.5	218	TO-3P

MOSFETs, Cont'd.

Product Number	Polarity	Configuration	BV_{DSS} Min. (V)	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 10V	Maximum Rating		Package
						I_D (A)	P_D (W)	
FQA13N50CF	N	Single	500	0.48	43	15	218	TO-3P
FQP9N50C	N	Single	500	0.8	28	9	135	TO-220
FQPF9N50C	N	Single	500	0.8	28	9	44	TO-220F
FQPF9N50CF	N	Single	500	0.85	28	9	44	TO-220F
FDPF7N50	N	Single	500	0.9	12.8	7	39	TO-220F
FQPF5N50CF	N	Single	500	1.55	18	5	38	TO-220F
FCP20N60	N	Single	600	0.19	75	20	208	TO-220
FCPF20N60	N	Single	600	0.19	75	20	39	TO-220F
FCA20N60	N	Single	600	0.19	75	20	208	TO-3PN
FCPF16N60	N	Single	600	0.26	50	16	37.9	TO-220F
FCA16N60_F109	N	Single	600	0.26	55	16	167	TO-3PN
FCP16N60	N	Single	600	0.26	55	16	167	TO-220
FCP11N60	N	Single	600	0.38	40	11	125	TO-220
FCPF11N60	N	Single	600	0.38	40	11	36	TO-220F
FQP12N60C	N	Single	600	0.65	48	12	225	TO-220
FQPF12N60C	N	Single	600	0.65	48	12	51	TO-220F
FQP10N60C	N	Single	600	0.73	44	9.5	156	TO-220
FQPF10N60C	N	Single	600	0.73	44	9.5	50	TO-220F
FQA10N60C	N	Single	600	0.73	44	10	192	TO-3P
FQP8N60C	N	Single	600	1.2	28	7.5	147	TO-220
FDP12N50	N	Single	500	0.65	22	11.5	165	TO-220
FDPF12N50T	N	Single	500	0.65	22	11.5	42	TO-220F

Diodes

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} Max. (V)	t_{rr} Max. (ns)	I_{RM} Max. (μA)	Package
ISL9R460PF2	600	4	50	2.4	22	100	TO-220F
FFP08H60S	600	8	60	2.1	45	100	TO-220
ISL9R860P2	600	8	100	2.4	30	100	TO-220
FFPF60SA60DS	600	8	80	2.4	25	100	TO-220F
ISL9R860PF2	600	8	100	2.4	25	100	TO-220F
FFPF08H60S	600	8	60	2.1	35	100	TO-220F
FFPF08S60S	600	8	80	2.6	25	100	TO-220F
FFPF10UP60S	600	10	50	2.2	40	100	TO-220F
FFPF10H60S	600	10	100	2.5	35	100	TO-220F
ISL9R1560P2	600	15	200	2.2	40	100	TO-220
ISL9R1560PF2	600	15	200	2.2	40	100	TO-220F
ISL9R1560G2	600	15	200	2.2	40	100	TO-247
FFPF20UP20DN	200	10	100	1.15	35	100	TO-220F



Bridge Rectifier

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package
GBPC1206	600	12	1.1	GBPC, GBPC-W

PFC (Power Factor Correction)

PFC Controllers

Product Number	Type	PFC Control	Startup Current (µA)	Operating Current (mA)	Drive Out (A)	F_{PWM}/ F_{PFC}	PWM Duty Cycle Max (%)	UVLO (V)	Options						Special Feature	Package
									Soft-start	Current Limit	Feed Fwd	Brownout	Soft Switching	Push-Pull		
FAN4800	PWM + PFC	Average Current	100	2.5	1	76	47	13/ 10	Yes	Yes	Yes	–	–	–	–	DIP
FAN4822	PFC	Average Current	700	22	0.5	–	–	13/ 10	Yes	Yes	Yes	Yes	Yes	–	Soft switching (ZVS)	DIP, SOIC-Wide
ML4800	PWM + PFC	Average Current	200	5.5	1	1	49	13/ 10	Yes	Yes	Yes	Yes	–	–	–	DIP, SOIC
ML4821	PFC	Average Current	600	26	1	–	–	15/ 10	Yes	Yes	Yes	Yes	–	–	–	DIP, SOIC-Wide
ML4824-1	PWM + PFC	Average Current	700	16	0.5	1	49	13/ 10	Yes	Yes	Yes	Yes	–	–	–	DIP, SOIC-Wide
ML4824-2	PWM + PFC	Average Current	700	16	0.5	2	49	13/ 10	Yes	Yes	Yes	Yes	–	–	–	DIP, SOIC-Wide
ML4826-2	PWM + PFC	Average Current	700	22	0.5	2	50	13/ 10	Yes	Yes	Yes	Yes	–	Yes	Push-Pull	DIP
ML4841	PWM + PFC	Average Current	700	17	0.5	2	50	13/ 10	Yes	Yes	Yes	Yes	–	–	–	DIP
ML4812	PFC	Peak Current	800	20	1	–	–	16/ 10	–	Yes	Yes	–	–	–	–	DIP, PLCC

MOSFETs

Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	I_D (A)	P_D (W)	Package
FDP16N50	N	500	Single	0.38	32	16	200	TO-220
FDPF16N50 (T)	N	500	Single	0.38	32	16	52	TO-220F
FDA16N50_F109	N	500	Single	0.38	32	16.5	205	TO-3PN
FDP18N50	N	500	Single	0.265	45	18	235	TO-220
FDPF18N50 (T)	N	500	Single	0.265	45	18	58	TO-220F
FDA18N50	N	500	Single	0.265	45	19	239	TO-3PN
FDP20N50	N	500	Single	0.23	45.6	20	250	TO-220
FDPF20N50 (T)	N	500	Single	0.23	45.6	20	62	TO-220F
FDA20N50_F109	N	500	Single	0.23	45.6	22	280	TO-3PN
FQA24N50	N	500	Single	0.2	90	24	290	TO-3P
FQA28N50	N	500	Single	0.16	110	28.4	310	TO-3P
FDH50N50	N	500	Single	0.105	105	48	625	TO-247
FDA50N50	N	500	Single	0.105	105	48	625	TO-3P
FQA19N60	N	600	Single	0.38	70	18.5	300	TO-3P
FCP16N60	N	600	Single	0.26	55	16	167	TO-220
FCPF16N60	N	600	Single	0.26	55	16	37.9	TO-220F
FCA16N60_F109	N	600	Single	0.26	55	16	167	TO-3PN
FCP20N60	N	600	Single	0.19	75	20	208	TO-220
FCPF20N60	N	600	Single	0.19	75	20	208	TO-220F
FCA20N60_F109	N	600	Single	0.19	75	20	208	TO-3PN
FQA24N60	N	600	Single	0.24	110	23.5	310	TO-3P
FCH47N60	N	600	Single	0.07	210	47	417	TO-247
FCA47N60_F109	N	600	Single	0.07	210	47	417	TO-3PN

Boost Diodes

Product Number	Function	Configuration	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} (V)	t_{rr} (ns)	I_{RM} (μA)	Package
FFP08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220
FFPF08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220F
FFPF10H60S	Hyperfast II	Single	600	10	100	2.5	35	100	TO-220F
RHRP1560	Hyperfast	Single	600	15	–	2.1	40	100	TO-220
ISL9R860P2	Stealth	Single	600	8	100	2.4	30	100	TO-220
ISL9R860PF2	Stealth	Single	600	8	100	2.4	30	100	TO-220F
FFP08S60S	Stealth II	Single	600	8	60	2.6	25	100	TO-220
FFPF08S60S	Stealth II	Single	600	8	60	2.6	25	100	TO-220F
ISL9R1560P2	Stealth	Single	600	15	200	2.2	40	100	TO-220
ISL9R1560PF2	Stealth	Single	600	15	200	2.2	40	100	TO-220F
ISL9R1560G2	Stealth	Single	600	15	200	2.2	40	100	TO-247
FFP15S60S	Stealth II	Single	600	15	150	2.6	35	100	TO-220
FFPF15S60S	Stealth II	Single	600	15	150	2.6	35	100	TO-220F
FFH15S60S	Stealth II	Single	600	15	150	2.6	35	100	TO-247

Main Switching

MOSFETs

Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 10V	I_D (A)	P_D (W)	Package
FDP16N50	N	500	Single	0.38	32	16	200	TO-220
FDPF16N50(T)	N	500	Single	0.38	32	16	52	TO-220F
FDA16N50_F109	N	500	Single	0.38	32	16.5	205	TO-3PN
FDP18N50	N	500	Single	0.265	45	18	235	TO-220
FDPF18N50(T)	N	500	Single	0.265	45	18	58	TO-220F
FDA18N50	N	500	Single	0.265	45	19	239	TO-3PN
FDP20N50	N	500	Single	0.23	45.6	20	250	TO-220
FDPF20N50(T)	N	500	Single	0.23	45.6	20	62	TO-220F
FDA20N50_F109	N	500	Single	0.23	45.6	22	280	TO-3PN
FQA24N50	N	500	Single	0.2	90	24	290	TO-3P
FQA28N50	N	500	Single	0.16	110	28.4	310	TO-3P

FPS (Fairchild Power Switches)

Product Number	Drain Voltage Max.	Static Drain-Source On-Resistance Max. (V)	Peak Current Limit (A)	Output Power Max. (W)		Protections					Package
				@ 85V_{AC} to 265V_{AC}	@ 230V_{AC}	Over Current	Over Lead	Over Voltage	Output Short	Thermal Shutdown	
FSFR2100U	500	0.51*2pcs	External Sensing Resistor	180	400	Latch	-	AR	-	Latch	9-SIP
FSFR2100US	500	0.51*2pcs		180	400	AR	AR	AR	-	AR	9-SIP
FSFR2000	500	0.67*2pcs		160	350	Latch	-	AR	-	Latch	9-SIP
FSFR1900	500	0.85*2pcs		140	300	Latch	-	AR	-	Latch	9-SIP
FSFR1800	500	0.95*2pcs		120	260	Latch	-	AR	-	Latch	9-SIP
FSFR1800US	500	0.95*2pcs		120	260	AR	AR	AR	-	AR	9-SIP
FSFR1700	500	1.25*2pcs		100	200	Latch	-	AR	-	Latch	9-SIP
FSFR1700	500	1.25*2pcs		100	200	AR	AR	AR	-	AR	9-SIP
FSFR2100	600	0.38*2pcs		200	450	Latch	-	AR	-	Latch	9-SIP
FSFA2100	600	0.38*2pcs		200	450	Latch	AR	AR	-	Latch	9-SIP
FAN7621	External MosFET	External MosFET		Up to 600W		Latch	-	AR	-	Latch	16DIP/SOP
FAN7621B						Latch	-	AR	-	Latch	16DIP/SOP
FAN7621S						AR	AR	AR	-	AR	16DIP/SOP

Switching frequency on all is 100kHz

Main Switching

MOSFETs

Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 10V	I_D (A)	P_D (W)	Package
FDH50N50	N	500	Single	0.105	105	48	625	TO-247
FDA50N50	N	500	Single	0.105	105	48	625	TO-3P
FQA19N60	N	600	Single	0.38	70	18.5	300	TO-3P
FCP16N60	N	600	Single	0.26	55	16	167	TO-220
FCPF16N60	N	600	Single	0.26	55	16	37.9	TO-220F
FCA16N60_F109	N	600	Single	0.26	55	16	167	TO-3PN
FCP20N60	N	600	Single	0.19	75	20	208	TO-220
FCPF20N60	N	600	Single	0.19	75	20	208	TO-220F
FCA20N60_F109	N	600	Single	0.19	75	20	208	TO-3PN
FQA24N60	N	600	Single	0.24	110	23.5	310	TO-3P
FCH47N60	N	600	Single	0.07	210	47	417	TO-247
FCA47N60_F109	N	600	Single	0.07	210	47	417	TO-3PN
FQA24N50F	N	500	Single	0.2	90	24	290	TO-3P
FQA28N50F	N	500	Single	0.16	110	28.4	310	TO-3P
FCA20N60F	N	600	Single	0.19	75	20	208	TO-3PN
FCH47N60F	N	600	Single	0.07	210	47	417	TO-247

High Voltage Gate Drivers

Product Number	Circuit		Offset Voltage (V)	Output current (mA)		Delay Time (ns)		Shut Down	Dead Time Control	Quiescent Current (μA)		dv/dt (V/ns)	V_B (V)	Package
	Type	Input to Output		Source	Sink	t_{ON}	t_{OFF}			I_{QBS}	I_{QCC}			
FAN7361	High side	1 - 1	600	250	500	120	90	No	No	50	30	50	–9.8	SOP-8
FAN7362	High side	1 - 1	600	250	500	120	90	No	No	50	30	50	–9.8	SOP-8
FAN7380	Half-bridge	2 - 2	600	90	180	135	130	No	Fixed	45	70	50	–9.8	SOP-8
FAN7382	High & low side	2 - 2	600	350	650	170	200	No	No	45	70	50	–9.8	SOP-8, DIP-8, SOP-14
FAN7383	Half-bridge	1 - 2	600	350	650	500	170	Yes	Variable	35	650	50	–9.8	SOP-14
FAN73832	Half-bridge	1 - 2	600	350	650	580	180	Yes	Variable	35	300	50	–9.8	SOP-8/DIP
FAN7384	Half-bridge	2 - 2	600	250	500	180	170	Yes	Fixed	50	600	50	–9.8	SOP-14
FAN7385	2 channel high side	2 - 2	600	350	650	110	110	No	No	50	28	50	–9.8	SOP-14
FAN7371	High side	1 - 1	600	4000	4000	150	150	No	No	65	25	50	–9.8	SOP-8

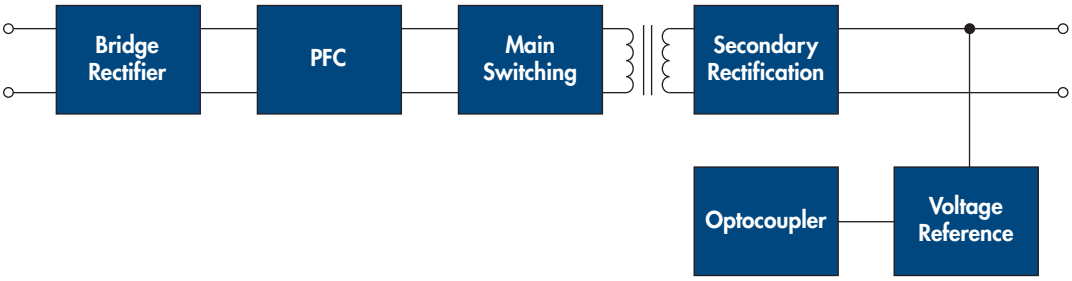
Auxiliary Power

FPS™ (Fairchild Power Switches)											
Product Number	Drain Voltage Max. (V)	Static Drain-Source On-Resistance Max. (Ω)	Peak Current Limit (A)	Output Power Max. @ 85-265 V_{AC} (W)	Output Power Max. @ 230 V_{AC} (W)	Switching Frequency (kHz)	Protections: Over Current	Protections: Over Load	Protections: Over Voltage	Protections: Thermal Shutdown	Package
KA5H0280R	800	7	1.2	20	24	100	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F
KA5M0280R	800	7	1.2	20	24	67	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F
KA5H0380R	800	5	2.2	32	40	100	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F
KA5L0380R	800	5	2.2	32	40	50	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F
KA5M0380R	800	5	2.2	32	40	67	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F
FS7M0680	800	2	4	64	80	67	Latch	Latch	Latch	Latch	TO-3P
FS7M0880	800	1.5	5	88	104	67	Latch	Latch	Latch	Latch	TO-3P
FSDM0565RL	700	2.2	2.25	60	70	67	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSQ0170RNA	700	11	0.8	13	20	100	No	Auto restart	Auto restart	Auto restart	DIP
FSQ0270RNA	700	7.2	0.9	16	24	100	No	Auto restart	Auto restart	Auto restart	DIP
FSQ0370RNA	700	4.75	1.1	19	27	100	No	Auto restart	Auto restart	Auto restart	DIP

Secondary Side Rectifier

Ultrafast Recovery Rectifiers									
Product Number	Function	Configuration	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} (V)	t_{rr} (ns)	I_{RM} (μA)	Package
FFP20UP20DN	UltraFast	Common Cathode	200	10	100	1.15	45	500	TO-220
FFPF06UP20S	UltraFast	Single	200	6	60	1.1	31	100	TO-220F
FFPF10UP20S	UltraFast	Single	200	10	100	1.1	32	100	TO-220F
FFPF20UP20DN	UltraFast	Common Cathode	200	10	100	1.15	45	500	TO-220F
FFP08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220
FFPF08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220F
FFPF10H60S	Hyperfast II	Single	600	10	100	2.5	35	100	TO-220F
RHRP15120	Hyperfast	Single	1200	15	200	3.2	75	100	TO-220
RHRP8120	Hyperfast	Single	1200	8	100	3.2	70	100	TO-220

For Optocouplers and Voltage Reference, please see page 26.



Bridge Rectifiers

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package
GBU6J	600	6	1	GBU
KBU6J	600	6	1	KBU

MOSFETs

Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	I_D (A)	P_D (W)	Package
FDPF7N50	N	500	Single	0.9	12.8	7	39	TO-220F
FQP9N50	N	500	Single	0.73	28	9	147	TO-220
FQA9N50	N	500	Single	0.73	28	9.6	160	TO-3P
FQP9N50C	N	500	Single	0.8	28	9	135	TO-220
FQPF9N50C	N	500	Single	0.8	28	9	44	TO-220F
FDP12N50	N	500	Single	0.65	22	11.5	165	TO-220
FDPF12N50T	N	500	Single	0.65	22	11.5	42	TO-220F
FQP13N50	N	500	Single	0.43	45	12.5	170	TO-220
FQPF13N50	N	500	Single	0.43	45	12.5	56	TO-220F
FQA13N50	N	500	Single	0.43	45	13.4	190	TO-3P
FQP13N50C	N	500	Single	0.48	43	13	195	TO-220
FQPF13N50C	N	500	Single	0.48	43	13	48	TO-220F
FQA13N50C	N	500	Single	0.48	43	13.5	218	TO-3P
FQP7N60	N	600	Single	1	29	7.4	142	TO-220
FQPF7N60	N	600	Single	1	29	7.4	48	TO-220F
FQA7N60	N	600	Single	1	29	7.7	152	TO-3P
FQP8N60C	N	600	Single	1.2	28	7.5	147	TO-220
FQPF8N60C	N	600	Single	1.2	28	7.5	48	TO-220F
FQP10N60C	N	600	Single	0.73	44	9.5	156	TO-220

MOSFETs, Cont'd.								
Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	I_D (A)	P_D (W)	Package
FQPF10N60C	N	600	Single	0.73	44	9.5	50	TO-220F
FQA10N60C	N	600	Single	0.73	44	10	192	TO-3P
FQP12N60C	N	600	Single	0.65	48	12	225	TO-220
FQPF12N60C	N	600	Single	0.65	48	12	51	TO-220F
FQPF12N60	N	600	Single	0.7	42	10.5	55	TO-220F
FCP7N60	N	600	Single	0.6	25	7	83	TO-220
FCPF7N60	N	600	Single	0.6	25	7	31	TO-220F
FCP11N60	N	600	Single	0.38	40	11	125	TO-220
FCPF11N60	N	600	Single	0.38	40	11	36	TO-220F

Boost Diodes									
Product Number	Function	Configuration	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	V_{FM} (V)	t_{rr} (ns)	I_{RM} (μA)	Package
ISL9K460P3	Stealth	CC	600	4	50	2.4	22	100	TO-220
ISL9R460P2	Stealth	Single	600	4	50	2.4	22	100	TO-220
RURP860	Ultrafast	Single	600	8	100	1.5	70	100	TO-220
FFP08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220
FFPF08H60S	Hyperfast II	Single	600	8	60	2.1	35	100	TO-220F
FFPF10H60S	Hyperfast II	Single	600	10	100	2.5	35	100	TO-220F
ISL9R860P2	Stealth	Single	600	8	100	2.4	30	100	TO-220
ISL9R860PF2	Stealth	Single	600	8	100	2.4	30	100	TO-220F
FFP08S60S	Stealth II	Single	600	8	60	2.6	25	100	TO-220
FFPF08S60S	Stealth II	Single	600	8	60	2.6	25	100	TO-220F

Main Switching

MOSFETs								
Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	I_D (A)	P_D (W)	Package
FDPF7N50	N	500	Single	0.9	12.8	7	39	TO-220F
FQP9N50	N	500	Single	0.73	28	9	147	TO-220
FQA9N50	N	500	Single	0.73	28	9.6	160	TO-3P
FQP9N50C	N	500	Single	0.8	28	9	135	TO-220
FQPF9N50C	N	500	Single	0.8	28	9	44	TO-220F
FDP12N50	N	500	Single	0.65	22	11.5	165	TO-220
FDPF12N50T	N	500	Single	0.65	22	11.5	42	TO-220F
FQP13N50	N	500	Single	0.43	45	12.5	170	TO-220
FQPF13N50	N	500	Single	0.43	45	12.5	56	TO-220F
FQA13N50	N	500	Single	0.43	45	13.4	190	TO-3P
FQP13N50C	N	500	Single	0.48	43	13	195	TO-220
FQPF13N50C	N	500	Single	0.48	43	13	48	TO-220F
FQA13N50C	N	500	Single	0.48	43	13.5	218	TO-3P
FQP7N60	N	600	Single	1	29	7.4	142	TO-220
FQPF7N60	N	600	Single	1	29	7.4	48	TO-220F
FQA7N60	N	600	Single	1	29	7.7	152	TO-3P
FQP8N60C	N	600	Single	1.2	28	7.5	147	TO-220
FQPF8N60C	N	600	Single	1.2	28	7.5	48	TO-220F

MOSFETs, Cont'd.								
Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @ V_{GS} = 10V	I_D (A)	P_D (W)	Package
FQP10N60C	N	600	Single	0.73	44	9.5	156	TO-220
FQPF10N60C	N	600	Single	0.73	44	9.5	50	TO-220F
FQA10N60C	N	600	Single	0.73	44	10	192	TO-3P
FQP12N60C	N	600	Single	0.65	48	12	225	TO-220
FQPF12N60C	N	600	Single	0.65	48	12	51	TO-220F
FQPF12N60	N	600	Single	0.7	42	10.5	55	TO-220F
FCP7N60	N	600	Single	0.6	25	7	83	TO-220
FCPF7N60	N	600	Single	0.6	25	7	31	TO-220F
FCP11N60	N	600	Single	0.38	40	11	125	TO-220
FCPF11N60	N	600	Single	0.38	40	11	36	TO-220F
FQPF9N50CF	N	500	Single	0.8	28	9	44	TO-220F
FQP11N50CF	N	500	Single	0.55	43	11	195	TO-220
FQPF11N50CF	N	500	Single	0.55	43	11	48	TO-220F
FCP11N60F	N	600	Single	0.38	40	11	125	TO-220
FCPF11N60F	N	600	Single	0.38	40	11	36	TO-220F

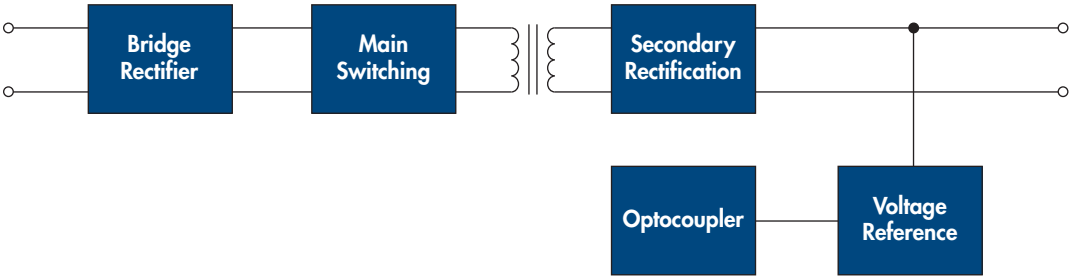
FPS™ (Fairchild Power Switches)											
Product Number	Drain Voltage Max. (V)	Static Drain-Source On-Resistance Max. (Ω)	Peak Current Limit	Output Power Max.		Switching Frequency (kHz)	Protections				Package
				@ 85-265 V_{AC} (W)	@ 230 V_{AC} (W)		Over Current	Over Load	Over Voltage	Thermal Shutdown	
FSGM0465R	650	2.6	1.8	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0465RB	650	2.6	2.7	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0465RS	650	2.6	3.0	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0565R	650	2.2	2.2	60	80	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0565RB	650	2.2	3.0	70	80	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0765R	650	1.6	2.6	70	90	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSL136MR	650	4	2.15	20	26	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL126MR	650	6	1.5	17	21	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL116LR	650	10	1.2	14	16	50	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL106HR	650	19	0.75	10	13	100	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSL106MR	650	19	0.58	8	10	67	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP

Output Short specification for all FPS products is auto restart

Secondary Side Rectifiers

Schottky Rectifiers								
Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	$R_{\theta JC}$ (°C/W)	V_{FM} (V)	I_{RM}		Package
						(μA)	@ V_R (V)	
FYPF1010DN	100	10	100	4	0.75	1000	100	TO-220F
SB5100	100	5	150	–	0.85	500	100	DO-201AD
SB3100	20	3	80	–	0.85	500	100	DO-201AD

For Optocouplers and Voltage Reference, please see page 26.



Bridge Rectifiers

Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	V_{FM} (V)	Package
3N250	600	1.5	1.3	KBPM
DF06M	600	1.5	1.1	DIP
DF06S	600	1.5	1.1	DIP
KBP06M	600	1.5	1.3	KBPM
W06G	600	1.5	1	WOB

Main Switching

MOSFETs

Product Number	Polarity	BV_{DSS} Min. (V)	Configuration	$R_{DS(ON)}$ Max. (Ω) @ V_{GS} = 10V	Q_G Typ. (nC) @V_{GS} = 10V	I_D (A)	P_D (W)	Package
FCP11N60	N	600	Single	0.38	40	11	125	TO-220
FCP11N60F	N	600	Single	0.38	40	11	125	TO-220
FCP7N60	N	600	Single	0.6	25	7	83	TO-220
FQP12N60C	N	600	Single	0.65	48	12	225	TO-220
FQP12N60	N	600	Single	0.7	42	10.5	180	TO-220
FQP10N60C	N	600	Single	0.73	44	9.5	156	TO-220
FQP7N60	N	600	Single	1	29	7.4	142	TO-220
FQP8N60C	N	600	Single	1.2	28	7.5	147	TO-220
FQP6N60	N	600	Single	1.5	20	6.2	130	TO-220
FQP6N60C	N	600	Single	2	16	5.5	125	TO-220
FQP7N65C	N	650	Single	1.4	28	7	160	TO-220
FCPF11N60	N	600	Single	0.38	40	11	36	TO-220F
FCPF11N60F	N	600	Single	0.38	40	11	36	TO-220F
FCPF7N60	N	600	Single	0.6	25	7	31	TO-220F
FQPF12N60C	N	600	Single	0.65	48	12	51	TO-220F
FQPF12N60	N	600	Single	0.7	42	5.8	55	TO-220F
FQPF10N60C	N	600	Single	0.73	44	9.5	50	TO-220F
FQPF8N60C	N	600	Single	1.2	28	7.5	48	TO-220F
FQPF6N60C	N	600	Single	2	16	5.5	40	TO-220F
FQPF7N65C	N	650	Single	1.4	28	7	52	TO-220F

PWM Controllers

Product Number	Number of Outputs	Control Mode	Switching Frequency (kHz)	Supply Voltage Max. (V)	Output Current Max. (A)	Duty Ratio (%)	Startup Current (μA)	Package
FAN7601B	1	Current	Progammable up to 300	20	0.25	98	1000	8DIP, 8SOIC, 10SSOP
FAN7602C	1	Current	65	25	0.45	75	250	8DIP, 8SOIC

FPS (Fairchild Power Switches)

Product Number	Drain Voltage Max. (V)	Static Drain-Source On-Resistance Max. (Ω)	Peak Current Limit (A)	Output Power Max.		Switching Frequency (kHz)	Protections				Package
				@ 85-265 V_{AC} (W)	@ 230 V_{AC} (W)		Over Current	Over Load	Over Voltage	Thermal Shutdown	
FSFM260	650	2.6	1.5	26	35	66	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSFM300	650	2.2	1.6	30	40	66	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSFM261	700	2.6	1.5	25	33.5	66	Auto restart	Auto restart	Auto restart	Auto restart	8-DIP
FSGM0465R	650	2.6	1.8	48	70	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L
FSGM0565R	650	2.2	2.2	60	80	66	Auto restart	Auto restart	Auto restart	Auto restart	TO-220F-6L

Secondary Side Rectifiers

Schottky Rectifiers

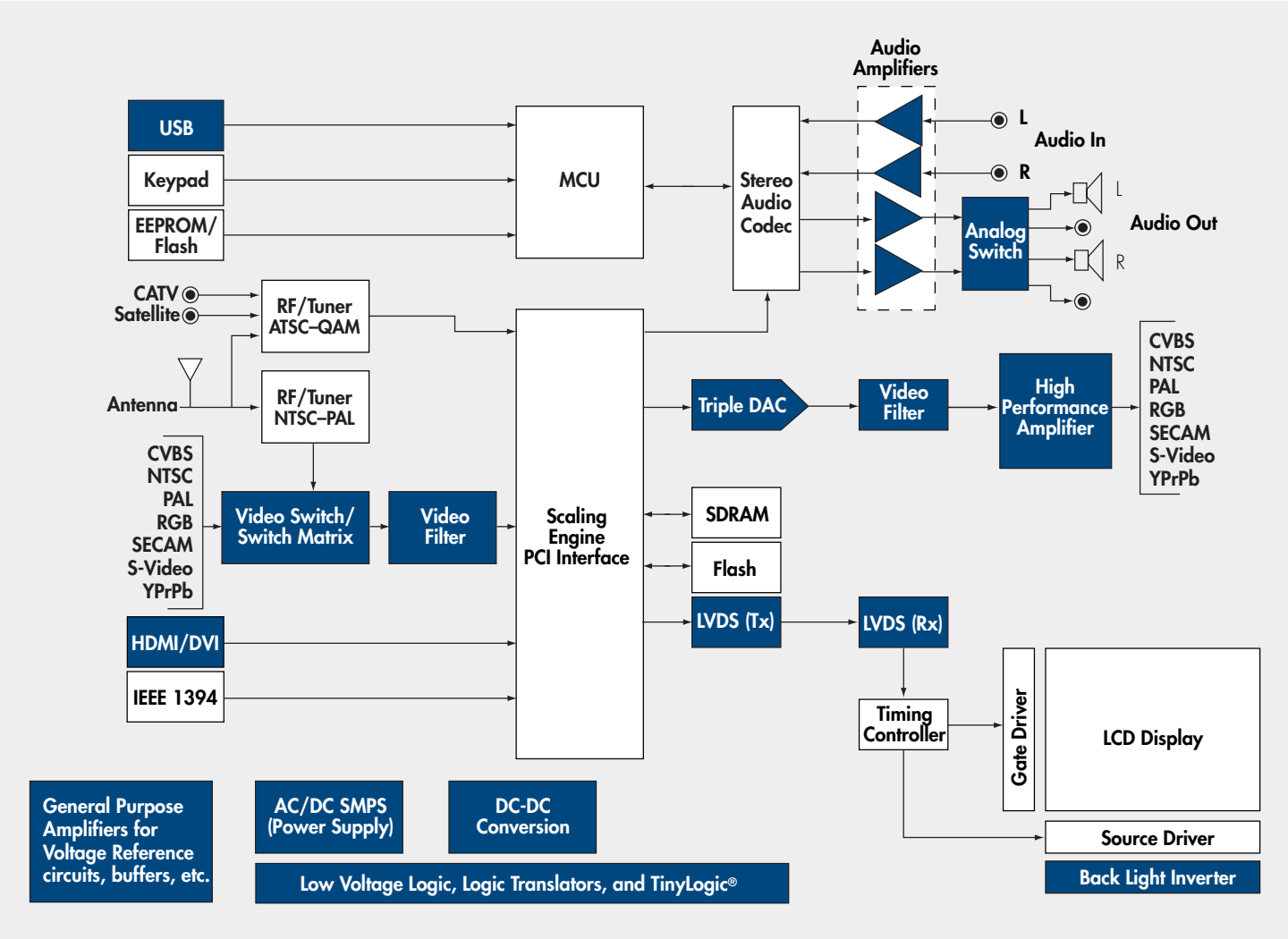
Product Number	V_{RRM} (V)	$I_{F(AV)}$ (A)	I_{FSM} (A)	$R_{\theta JC}$ (°C/W)	V_{FM} (V)	I_{RM}		Package
						(μA)	@ V_R (V)	
1N5822	40	3	80	–	0.525	500	40	DO-201AD
FMKA140	40	1	30	9.6	0.6	1000	40	SMA
FYP2010DN	100	20	150	1.7	0.77	100	100	TO-220

Voltage Reference and Shunts

Product Number	Preset Output Voltage (V)	Adj. Output Voltage (V)		Tolerance (%)	Max. Current (mA)	Package
		Min.	Max.			
FAN431	2.5 Adj	2.5	37	2	100	TO-92
KA431	2.5 Adj	2.5	37	2	100	TO-92, DIP, SOIC
KA431A	2.5 Adj	2.5	37	1	100	TO-92, SOIC
KA431L	2.5 Adj	2.5	37	0.5	100	TO-92, SOIC
KA431S	2.5 Adj	2.5	37	2	100	SOT-23F

Optocouplers—Optically Isolated Error Amplifier, DC Sensing Input with Voltage Reference

Product Number	V_{REF} Min. (V)	V_{REF} Max. (V)	CTR @10mA I_F (%)		BV_{CEO} Min. (V)	V_{ISO} ACR_{MS} (V) I minute	Package
			Min.	Max.			
FOD2711	1.221	1.259	100	200	70	5000	DIP-8
FOD2741A	2.482	2.508	100	200	70	5000	DIP-8
FOD2741B	2.47	2.52	100	200	70	5000	DIP-8
FOD2741C	2.45	2.55	100	200	70	5000	DIP-8
FOD2743A	2.482	2.508	100	200	70	5000	DIP-8
FOD2743B	2.47	2.52	100	200	70	5000	DIP-8
FOD2743C	2.45	2.55	100	200	70	5000	DIP-8



Example: LCD TV Block Diagram

Audio Amp Output Transistors

Product Number		V_{CBO} (V)	V_{CEO} (V)	V_{EBO} (V)	I_C (A)	h_{FE}				$V_{CE(SAT)}$ (V)				Package
NPN	PNP					Min.	Max.	@V_{CE} (V)	@I_c (A)	Min.	Max.	@I_c (A)	@I_B (A)	
FJA4310	FJA4210	200	140	6	10	50	180	4	3	–	0.5	5	0.5	TO-3P
FJA4313	FJA4213	230	230	5	15	55	160	5	1	–	0.5	5	0.5	TO-3P
FJAF4310	FJAF4210	200	140	6	10	50	180	4	3	–	0.5	5	0.5	TO-3PF
FJL4315	FJL4215	230	230	5	15	55	160	5	1	0.4	3	–	–	TO-264
KSC4010	KSA3010	120	120	5	6	55	160	5	1	–	0.5	5	0.5	TO-3P

Audio/Power Amplifier

Product Number	V_{CC} (V)		Output Power (W)	Number of Channels	Auxiliary Headphone Driver	Mute	Thermal Shutdown	Load Mode	Shut down	Package
	Min.	Max.								
FAN7040	4.5	18	3	1	Yes	Yes	Yes	BLT	Yes	SOP

Current Sense Amplifiers

Product Number	Input Voltage (V)	Accuracy @ V_{SENSE}	Supply Current I_S (µA)	Gain I_{OUT} V_{SENSE}	Bandwidth	Package
FAN4010	2 - 6	0.2% @ 100mV	3.5	10mA/V	2.0	SOT-23

Audio Analog Switches

Product Number	Type	Signal Range	R_{ON} (Ω)	V_{CC} (V)	Band-width (MHz)	C_{ON} (pF)	C_{OFF} (pF)	ESD HBM (kV)	Low I_{cct}	Power-off Protection	Package
FSA2257	SPDT (Con.) (2x)	0 to V_{CC}	0.95	1.65 to 5.5	350	40	12	8	–	–	MicroPak™ (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch) TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch) MSOP (MUX) (10-lead, 3x4.9mm, 0.5mm pitch)
FSA2258	SPDT (Con.) (2x)	0 to V_{CC}	0.8	1.65 to 4.3	>50	120	30	16	Yes	Yes	MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch)
FSA2259	SPDT (Con.) (2x)	0 to V_{CC}	0.8	1.65 to 4.3	>50	120	30	16	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch)
FSA2267	SPDT (Con.) (2x)	0 to V_{CC}	0.35	1.65 to 3.6	45	126	30	7.5	–	–	MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch) MSOP (MUX) (10-lead, 3x4.9mm, 0.5mm pitch)
FSA2267A	SPDT (Con.) (2x)	0 to V_{CC}	0.35	2.3 to 4.3	45	126	30	7	Yes	–	MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch) MSOP (MUX) (10-lead, 3x4.9mm, 0.5mm pitch)
FSA2268	SPDT (Con.) (2x)	0 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	16	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch) MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch)
FSA2268T	SPDT (Con.) (2x)	0 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	16	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch) MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch)
FSA2357	DP3T (Con.)	0 to V_{CC}	0.55	2.6 to 4.5	>120	70	42	8	Yes	Yes	DQFN (BQX) (14-lead, 2.5x3mm, 0.5mm pitch) TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch)
FSA2467	DPDT (Con.) (2x)	0 to V_{CC}	0.4	1.65 to 4.3	85	118	32	5.5	Yes	–	UMLP (UMX) (16-lead, 1.8x2.6mm, 0.4mm pitch) MLP (MPX) (16-lead, 3x3mm, 0.5mm pitch)
FSA2859	DPDT (Con.)	0 to V_{CC}	0.8	1.65 to 5.5	50-60	150	50	8	Yes	Yes	WLCSP (UCX) (12-ball, 1.91x1.41mm, 0.5mm pitch)
NEGATIVE SWING											
FSA2147	DPST (NO) (1x)	V_{CC} – 4.3 to V_{CC}	2.5	2.7 to 4.3	–	–	6	12	Yes	Yes	US8 (K8X) (8-lead, 2x3.1mm, 0.5 pitch)
FSA2269	SPDT (Con.) (2x)	V_{CC} – 4.6 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	12	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch) MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch)
FSA2269TS	SPDT (Con.) (2x)	V_{CC} – 4.6 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	12	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch) MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch)

Audio Analog Switches

Product Number	Type	Signal Range	R_{ON} (Ω)	V_{CC} (V)	Band-width (MHz)	C_{ON} (pF)	C_{OFF} (pF)	ESD HBM (kV)	Low I_{cct}	Power-off Protection	Package
NEGATIVE SWING											
FSA2270T	SPDT (Con.) (2x)	V_{CC} – 4.3 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	11	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch)
FSA2271T	SPDT (Con.) (2x)	V_{CC} – 4.3 to V_{CC}	0.4	1.65 to 4.3	>50	120	30	10	Yes	Yes	UMLP (UMX) (10-lead, 1.4x1.8mm, 0.4mm pitch)
FSA2367	SPDT (Con.) (3x)	V_{CC} – 5.5 to V_{CC} – 0.3	0.75	2.6 to 4.3	>150	55	20	8	Yes	Yes	DQFN (BQX) (14-lead, 2.5x3mm, 0.5mm pitch) TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch)
FSA2380	DP3T (Con.)	V_{CC} – 5.5 to V_{CC} – 0.3	0.75	2.6 to 4.3	>120	70	42	8	Yes	Yes	DQFN (BQX) (14-lead, 2.5x3mm, 0.5mm pitch) TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch)
FSA6157	SPDT (Con.) (1x)	V_{CC} – 4.3 to V_{CC}	0.8	1.65 to 4.3	50	150	30	16	Yes	Yes	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch)

General Analog Switches

Product Number	Type	Signal Range	R_{ON} (Ω)	V_{CC} (V)	Bandwidth (MHz)	C_{ON} (pF)	C_{OFF} (pF)	ESD HBM (kV)	Low I_{CCT}	Power-off Protection	Package
FSA1156	SPST (NO) (1x)	0 to V_{CC}	0.75	1.65 to 5.5	300	65	20	8	–	–	MicroPak™ (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA1157	SPST (NC) (1x)	0 to V_{CC}	0.75	1.65 to 5.5	300	65	20	8	–	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA1256	SPST (NO) (2x)	0 to V_{CC}	0.95	1.65 to 5.5	300	27	11.5	5.5	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1256A	SPST (NO) (2x)	0 to V_{CC}	0.95	2.7 to 5.5	300	27	11.5	4.5	Yes	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1257	SPST (NC) (2x)	0 to V_{CC}	0.95	1.65 to 5.5	300	27	11.5	5.5	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1257A	SPST (NC) (2x)	0 to V_{CC}	0.95	2.7 to 5.5	300	27	11.5	4.5	Yes	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1258	SPST (NO/ NC) (2x)	0 to V_{CC}	0.95	1.65 to 5.5	300	27	11.5	5.5	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1258A	SPST (NO/NC) (2x)	0 to V_{CC}	0.95	2.7 to 5.5	300	27	11.5	4.5	Yes	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch)
FSA1259	SPST (NO) (2x)	0 to V_{CC}	1	1.65 to 5.5	240	47	21	8	–	Yes	US8 (K8X) (8-lead, 2x3.1mm, 0.5mm pitch)
FSA1259A	SPST (NO) (2x)	0 to V_{CC}	1	1.65 to 5.5	240	47	21	8	Yes	Yes	US8 (K8X) (8-lead, 2x3.1mm, 0.5 pitch)

General Analog Switches (Continued)

Product Number	Type	Signal Range	R_{ON} (Ω)	V_{CC} (V)	Bandwidth (MHz)	C_{ON} (pF)	C_{OFF} (pF)	ESD HBM (kV)	Low I_{CCT}	Power-off Protection	Package
FSA2156	SPST (NO) (1x)	0 to V_{CC}	0.4	3.0 to 4.3	80	115	38	8	Yes	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA266	SPST (NO) (2x)	0 to V_{CC}	6	1.65 to 5.5	300	10	5	4	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch) US8 (K8X) (8-lead, 2x3.1mm, 0.5mm pitch)
FSA3157	SPDT (Con.) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	19	6.5	4	–	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA3157B	SPDT (Con.) (1x)	0 to V_{CC}	10	1.65 to 5.5	250	18.5	6.5	4	Yes	–	MicroPak2™ (FHX) (6-lead, 1x1mm 0.35mm pitch) Micropak (L8X) (6-lead, 1.45x1mm, 0.5mm pitch)
FSA3357	SP3T (Con.) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	14.5	3.6	5.5	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch) US8 (K8X) (8-lead, 2x3.1mm, 0.5mm pitch)
FSA4157	SPDT (Con.) (1x)	0 to V_{CC}	0.95	1.65 to 5.5	350	40	12	7.5	–	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA4157A	SPDT (Con.) (1x)	0 to V_{CC}	0.95	2.7 to 5.5	350	40	12	7.5	Yes	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA4159	SPDT (Con.) (1x)	0 to V_{CC}	1	1.65 to 5.5	180	41	12	4	Yes	Yes	MicroPak™ (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
FSA5157	SPDT (Con.) (1x)	0 to V_{CC}	0.35	1.65 to 3.6	45	90	21	8	Yes	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)

General Analog Switches (Continued)

Product Number	Type	Signal Range	R_{ON} (Ω)	V_{CC} (V)	Bandwidth (MHz)	C_{ON} (pF)	C_{OFF} (pF)	ESD HBM (kV)	Low I_{CCT}	Power-off Protection	Package
FSA66	SPST (NO) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	6	–	4	Yes	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P5X) (5-lead, 2x1.25mm, 0.65mm pitch) SOT23 (M5X) (5-lead, 3x3mm, 0.95mm pitch)
FSA839	SPDT (Con.) (1x)	0 to V_{CC}	0.8	1.65 to 5.5	50-60	150	50	8	Yes	Yes	WLCSP (UCX) (6-ball, 1.6x0.76mm, 0.4mm pitch)
FSA859	SPDT (Con.) (1x)	0 to V_{CC}	0.8	1.65 to 5.5	50-60	150	50	8	Yes	Yes	WLCSP (UCX) (8-ball, 1.91x0.91mm, 0.5mm pitch)
FSAU3157	SPDT (Con.) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	18.5	6.5	4.5	–	–	SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
NC7SB3157	SPDT (Con.) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	18.5	6.5	4	–	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
NC7S-BU3157	SPDT (Con.) (1x)	0 to V_{CC}	5	1.65 to 5.5	250	18.5	6.5	4.5	–	–	SC70 (P6X) (6-lead, 2x1.25mm, 0.65mm pitch)
NC7SZ66	SPDT (NO) (1x)	0 to V_{CC}	5	1.65 to 5.5	–	–	–	2	–	–	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P5X) (5-lead, 2x1.25mm, 0.65mm pitch) SOT23 (M5X) (5-lead, 3x3mm, 0.95mm pitch)
NC7WB66	SPST (NO) (2x)	0 to V_{CC}	6	1.65 to 5.5	300	10	5	4	–	–	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch) US8 (K8X) (8-lead, 2x3.1mm, 0.5mm pitch)

Bus Switches

Product Number	Number of Bits	Configuration	Control State	R_{ON} (Ω)	V_{CC} (V)	Package
FSLV16211	24	2x12	Low	5	2.3 to 3.6	TSSOP (MTD)(56-Lead , 8.1x14mm, 0.5mm pitch)
FST3125	4	4x1	Low	4	4 to 5.5	TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch) SOIC (MX) (14-lead, 6x8.75mm, 1.27mm pitch)
FST3126	4	4x1	High	4	4 to 5.5	TSSOP (MTCX) (14-lead, 5x6.4mm, 0.65mm pitch) SOIC (MX) (14-lead, 6x8.75mm, 1.27mm pitch)
FST3244	8	4x2	Low	4	4 to 5.5	TSSOP (MTCX) (20-lead, 6.4x6.5mm, 0.65mm pitch) SOIC (MX) (20-lead, 10.65x13mm, 1.27mm pitch)
FST3257	8	4x2.1	Low	4	4 to 5.5	TSSOP (MTCX) (16-lead, 5x6.4mm, 0.65mm pitch) SOIC (MX) (16-lead, 6x10mm, 1.27mm pitch)
FST3306	2	2x1	Low	3	4 to 5.5	TSSOP (MTCX) (8-lead, 6.4x3mm, 0.65mm pitch)
FSTD16211	24	2x12	Low	4	4.5 to 5.5	TSSOP (MTD) (56-lead , 8.1x14mm, 0.5mm pitch)
FSTUD16211	24	2x12	Low	4	4.5 to 5.5	TSSOP (MTD) (56-lead , 8.1x14mm, 0.5mm pitch)
NC7SZ384	1	–	Low	5	4 to 5.5	MicroPak (L6X) (6-lead, 1.45x1mm, 0.5mm pitch) SC70 (P5X) (5-lead, 2.1x2mm, 0.65mm pitch) SOT23 (M5X) (5-lead, 3x3mm, 0.95mm pitch)
NC7WB3125	2	2x1	Low	3	4 to 5.5	MicroPak (L8X) (8-lead, 1.6x1.6mm, 0.5mm pitch) US8 (K8X) (8-lead, 2x3.1mm, 0.5mm pitch)

USB Switches

Product Number	Type	Path Type	Port	Signal Range	R_{ON} (Ω)	C_{ON} (pF)	Bandwidth (MHz)	V_{CC} (V)	I_{CC} (A)	ESD HBM (kV)	Package
FSUSB22	DPDT (1x)	1 USB (HS / FS)	D+ / D-	0 to V_{CC}	5	12	750	3.0 to 3.6	1µ	4	DQFN (BQX) (16-lead, 3.5x2.5mm, 0.5mm pitch) TSSOP (MTCX) (16-lead, 6.4x5, 0.65mm pitch) QSOP (QSCX) (16-lead, 3.9x5, 0.65mm pitch)
		1 USB (HS / FS)									
	DPDT (1x)	1 USB (HS / FS)	D+ / D-								
		1 USB (HS / FS)									
FSUSB31	SPST (2x)	1 USB (HS / FS)	D+ / D-	0 to V_{CC}	6.5	3.7	720	3.0 to 4.3	1µ	7.5	MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch) DQFN (BQX) (14-Lead, 3.0x2.5, 0.5mm pitch) MSOP (MUX) (10-lead, 3x4.9mm, 0.5mm pitch) UMLP (UMX) (10-Lead, 1.4x1.8, 0.4mm pitch)
FSUSB42	DPDT (1x)	1 USB (HS / FS)	D+ / D-	0 to V_{CC}	3.7	3.7	720	3.0 to 4.3	1µ	7	MicroPak (L10X) (10-lead, 1.6x2.1mm, 0.5mm pitch) MSOP (MUX) (10-lead, 3x4.9mm, 0.5mm pitch)
		1 USB (HS / FS)									

General Purpose Amplifiers

Product Number	Number of Amps	Power Down	CMIR Incl. Rail	RRIO	GBWP[1] (MHz)	SR (V/µs)	I_s[2] (mA)	I_{OUT} (mA)	V_{IO} (mV)	I_b (nA)	A_{OL} (dB)	V_S Min. (V)	V_S Max. (V)	Package
LMV321	1	No	Yes	No	1.4	2	0.1	+34, –23	1	1	70	2.5	5.5	SOT-23-5, SC70-5
LMV358	2	No	Yes	No	1.4	2	0.1	+34, –23	1	1	70	2.5	5.5	SOIC-8, MSOP-8
LMV324	4	No	Yes	No	1.4	2	0.1	+34, –23	1	1	70	2.5	5.5	SOIC-14, TSSOP-14
FAN4174	1	No	Yes	Both	3.7	3	0.2	+34, –23	0	$5x10^{-3}$	102	2.5	5.5	SOT-23-5, SC70-5
FAN4274	2	No	Yes	Both	3.7	3	0.2	+34, –23	0	$5x10^{-3}$	102	2.5	5.5	MSOP-8
FAN4931	1	No	Yes	Both	3.7	3	0.2	+34, –23	0	$5x10^{-3}$	102	2.5	5.5	SC70-5

Note[1] Gain bandwidth product Note[2] Supply current per channel Temperature range for all devices: -40°C or +85°C

High Performance Amplifiers

Product Number	No. of Amps	Power Down	RRIO	BW[1] (MHz)	SR (V/µs)	DG/DP (%/°)	I_s[2] (mA)	I_{OUT} (mA)	e_n (nV/√Hz)	V_{IO} (mV)	I_b (µA)	A_{OL} (dB)	V_s Min. (V)	V_s Max. (V)	Package
FHP3350	3	Yes	No	210	1.100	0.07/0.03	3.6	±55	9	1	0.05	58	3	12	TSSOP-14, SOIC-14
FHP3230	2	No	Output	50	110	0.008/0.01	2.5	±100	17	1	-1.8	100	2.7	12	MSOP-8, SOIC-8

Note[1] Small signal, G = 2 bandwidth

Note[2] Supply current per channel

Temperature range for all devices: -40°C or +85°C

Logic Translators

Product Number	Bit Width	Pins	Uni-Directional	Bi-Directional	Automatic Direction Control	Voltage Range A Side (V)	Voltage Range B Side (V)	Recommended Package	Comments
FXLA101	1	6		X	X	1.1 - 3.6	1.1 - 3.6	6 Pin MicroPak	Direction control not necessary
FXLP34	1	5,6	X			1.0 - 3.6	1.0 - 3.6	6 Pin MicroPak	Lowest input voltage range
FXLH1T45	1	6		X		1.1 - 3.6	1.1 - 3.6	6 Pin MicroPak	
FXLA102	2	8		X	X	1.1 - 3.6	1.1 - 3.6	8 Pin MicroPak	Direction control not necessary
FXL2T245	2	10		X		1.1 - 3.6	1.1 - 3.6	10 Pin MicroPak	
FXL2TD245	2	10		X		1.1 - 3.6	1.1 - 3.6	10 Pin MicroPak	
FXLA104	4	16		X	X	1.1 - 3.6	1.1 - 3.6	16 Pin UMLP	Direction control not necessary
FXL2SD106	6	16		X	X	1.1 - 3.6	1.1 - 3.6	16 Pin DQFN	SD card and SDIO translator
FXL4TD245	4	16		X		1.1 - 3.6	1.1 - 3.6	16 Pin DQFN	
FXL4T245	4	14		X		1.1 - 3.6	1.1 - 3.6	14 Pin DQFN	
FXL5T244	5	14	X			1.1 - 3.6	1.1 - 3.6	14 Pin DQFN	
FXL3SD206	6	24		X	X	1.65 - 3.6	1.65 - 3.6	24 Pin UMLP	MUX/DEMUX of SDIO translator
FXLA108	8	20		X	X	1.1 - 3.6	1.1 - 3.6	20 Pin DQFN	Direction control not necessary
FXLH42245	8	24		X		1.1 - 3.6	1.1 - 3.6	24 Pin MLP	
FXL4245	8	24		X		1.1 - 3.6	1.1 - 3.6	24 Pin MLP	
74LVX3245	8	24		X		2.7 - 3.6	4.5 - 5.5	24 Pin TSSOP	
74LVXC3245	8	24		X		2.7 - 3.6	3.0 - 5.5	24 Pin TSSOP	
74LVX4245	8	24		X		4.5 - 5.5	2.7 - 3.6	24 Pin TSSOP	
74LVXC4245	8	24		X		4.5 - 5.5	2.7 - 5.5	24 Pin TSSOP	
74VCX163245	16	48		X		2.3 - 3.6	1.65 - 2.7	48 Pin TSSOP	
74VCX164245	16	48		X		1.65 - 2.7	2.3 - 3.6	48 Pin TSSOP	

Low Voltage Logic

CROSSVOLT™	Specified Power Supply Nominal V_{CC} (V)	Compatibility Input[1] V_{IL}/V_{IH}	Output[2] V_{OL}/V_{OH}	Input Current[3] I_{IL}/I_{IH} (µA/µA)	Drive I_{OL}/I_{OH} (mA/mA)	Supply Current[3] I_{CC} (mA)	Speed[3] t_{PD} (ns)
ALVC	1.8/2.5/3.3	TTL, CMOS	TTL, CMOS	-5/5	-24/24	20	3.0
LCX (8)	2.5/3.3	TTL, CMOS	TTL, CMOS	-5/5	-24/24	10	6.5
LCX (16)	2.5/3.3	TTL, CMOS	TTL, CMOS	-5/5	-24/24	20	4.5
LVX (8)	3.3	TTL, CMOS	TTL, CMOS	-1/1	-4/4	40	12.0
VCX[4]	1.2/1.5/1.8/2.5/3.3	TTL, CMOS	TTL, CMOS	-5/5	-24/24	20	2.5/3.2

Note[1] Input levels recognized by the device

Note[2] Input levels the device is capable of driving

Note[3] Maximum specification at maximum specified V_{CC}

Note[4] C_{LOAD} = 30pF

LVDS

Product Number	Description	Max. Speed (Mbps)	Number of Bits	Package
FIN3385	Low voltage 28-bit flat panel display link serializers	595	28	TSSOP
FIN3386	Low voltage 28/21-bit flat panel display link serializers/deserializers	462	28	TSSOP

TinyLogic®

Product Family	Standard Logic Family Equivalent	I_{cc} (µA)	V_{cc} (V)	Drive (mA @ V)	Speed (ns @ V)
HS	HC	10	2 - 6	±1.1 @ 3.0; ±2.0 @ 4.5	25 @ 4.5
HST	HCT	10	4.5 - 5.5	±2.0 @ 4.5	20 @ 2.0
UHS	LCX/LVC	20	1.8 - 5.5	±4.0 @ 1.65; ±24.0 @ 3.3	4.7 @ 3.3
ULP	–	0.9	0.9 - 3.6	±1.0 @ 1.5; ±2.6 @ 3.0	16 @ 1.5; 7.0 @3.3
ULP-A	VCX	0.9	0.9 - 3.6	±4.0 @ 1.5; ±24.0 @ 3.3	7.2 @ 1.5

USB Transceivers

Product Number	Description	Output Characteristics	Supply Voltage (V)	Input Characteristics	Package
USB1T1103	Universal serial bus peripheral transceiver with voltage regulator	–	–	–	MLP
USB1T20	Universal serial bus transceiver	3-state	3.3	–	MLP, TSSOP
USB1T1105A	Universal serial bus peripheral transceiver with voltage regulator	Different outputs	–	Differential inputs	MHBCC

Video Filter Drivers

Product Number	No. of Filter/ Device	Input Format			YUV/ YPbPr	Output Format					4:2:2	Progressive Scan	HD	Cutoff (MHz)	LP Filter Order	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB		CV	Y/C S-Video	RGB	YUV/ YPbPr	Sound Notch							
FMS6141	1/1	✓	–	–	–	✓	–	–	–	–	–	–	–	8	4	AC-AC	6
FMS6151	1/1	✓	–	✓	✓	✓	–	✓	✓	–	–	–	–	8	5	DC-AC, DC	6
FMS6400-1	2/3	✓	✓	–	–	✓	✓	–	–	–	–	–	–	5	5	AC-AC, DC	0.6
FMS6410B	2/3	✓	✓	–	–	✓	✓	–	–	–	–	–	–	7.1	5	AC-AC, DC	6
FMS6143	3/3	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	8	4	AC, DC-AC, DC	6
FMS6143A	3/3	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	8MHz	6th	AC/DC In/Out	6dB
FMS6144A	4/4	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	8MHz	6th	AC/DC In/Out	6dB
FMS6364A	4/4	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	✓	8/32MHz	7th	AC/DC In/Out	6dB

Video Filter Drivers, Cont'd.

Product	No. of Filter/ Device	Input Format			YUV/ YPbPr	Output Format					4:2:2	Progressive Scan	HD	Cutoff (MHz)	LP Filter Order	Coupling In/Out	Output Driver Gain (dB)
		CV	Y/C S-Video	RGB		CV	Y/C S-Video	RGB	YUV/ YPbPr	Sound Notch							
FMS6203	3/3	✓	✓	✓	✓	✓	✓	✓	–	–	–	✓	✓	8, 15, 30	6	AC, DC-AC, DC	0, 6, 9, 12
FMS6363	3/3	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	✓	30	6	AC, DC-AC, DC	6
FMS6403	3/3	–	–	✓	✓	–	–	✓	✓	–	–	✓	✓	8, 15, 30	6	AC-AC, DC	0,6
FMS6406	2/4	✓	✓	–	–	✓	✓	–	–	✓	–	–	–	7.1	5	AC-DC	6
FMS6145	5/5	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	8	4	AC, DC-AC, DC	6
FMS6146	6/6	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	–	8	4	AC, DC-AC, DC	6
FMS6346	6/6	✓	✓	✓	✓	✓	✓	✓	✓	–	–	–	✓	8, 32	6	AC, DC-AC, DC	6
FMS6690	6/6	✓	✓	✓	✓	✓	✓	✓	✓	–	–	✓	✓	8, 15, 32	6	AC, DC-AC, DC	6

Video/HDMI Switches

Product Number	Configuration	On-Resistance R_{ON} (Ω)	Supply Voltage Range V_{CC} (V)	Bandwidth (MHz)	C_{ON} (pF)	Package
FSAV330	4 channel (2:1) video	7.0	4.0 - 5.5	300	12	TSSOP, QSOP, SOIC-16
FSAV331	2 channel (4:1) video	5.0	4.75 - 5.25	300	39	QSOP, TSSOP-16
FSAV332	4 channel (SPST) video	7.0	4.75 - 5.25	368	30	QSOP, TSSOP-14
FSAV430	4 channel (2:1) video	4.5	3.0 - 3.6	1000	12	TSSOP, QSOP, DQFN-16
FSAV450	4 channel (2:1) video	4.0	4.0 - 5.5	750	8	QSOP, TSSOP, DQFN-16
FSAV433	3 channel (3:1) video	6.5	3.0 - 3.6	550	15	DQFN, TSSOP-20
FSHDMI04	4 channel diff. (2:1)mux	12.0	3.0 - 3.6	825	6	QVSOP 48
FSHDMI08	Differential mux	TMDS 19.0	3.0 - 3.6	1650	TMDS 6	56-Lead TSSOP, 56-Lead MLP

Video Switch Matrix

Product Number	Number of Inputs	Number of Outputs	Programmable Gain	Control Interface	Input Clamp	Standards Supported	Supply Voltage (V)	Coupling	Output Driver Gain (dB)	Package
FMS6501	12	9	✓	I²C	✓	480i (NTSC), 576i (PAL), 480p, 720p, 1080i, 1080p	3.3 - 5	AC or DC Input	6, 7, 8, 9	SSOP-28
FMS6502	8	6	✓	I²C	✓	480i (NTSC), 576i (PAL), 480p, 720p, 1080i, 1080p	3.3 - 5	AC or DC Input	0, 6	TSSOP-24

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- Continuous Conduction Mode (CCM) PFC Controllers
- Critical (CrCM) / Boundary Conduction Mode (BCM) PFC Controllers
- PFC + PWM Combination (Combo) Controllers

Isolated DC-DC

- Green-Mode PWM Controllers
- Integrated Green-Mode PWM Regulators (Green FPS™)
- Integrated PWM Regulators (FPS™)
- Primary-side only CV/CC Controllers
- Standard SMPS PWM Controllers
- Synchronous Rectifier Controller

Non-Isolated DC-DC

- Charge-Pump Converters
- Multi-phase Controllers
- Step-down Controllers (External Switch)
- Step-down Regulators (Integrated Switch)
- Step-up Regulators (Integrated Switch)

Power Drivers

- High Voltage Gate Drivers (HVIC)
- Low-Side Gate Drivers
- Synchronous Rectifier Controllers/Drivers
- Synchronous-Buck/Multi-phase Drivers

Supervisory/Monitor ICs

- Ground Fault Interrupt (GFI) Controllers
- Supervisors + PWM
- Temperature Sensors
- Voltage Supervisors/Detectors/Stabilizers

Voltage Regulators

- LDOs
- Positive Voltage Linear Regulators
- Negative Voltage Linear Regulators
- Shunt Regulators

POWER SEMICONDUCTORS

Diodes & Rectifiers

- Bridge Rectifiers
- Rectifiers
- Schottky Diodes and Rectifiers
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- Zener Diodes

IGBTs

- Discrete IGBTs
- Ignition IGBTs
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Integrated Power Solutions

- DrMOS FET Plus Driver Multi-Chip Modules
- IGBT Modules
- Full Function Load Switches (IntelliMAX™)
- MOSFET/Schottky Combos
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- Smart Switches

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- Discrete MOSFETs
- Full Function Load Switches (IntelliMAX™)
- MOSFET/Schottky Combos

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- BJTs
- Discrete IGBTs
- JFETs
- Load Switches
- MOSFETs
- Small Signal Transistors

TRIACs

- TRIACs

LIGHTING AND DISPLAY

- CCFL Ballast IC
- CFL/Lighting Ballast Control IC
- Critical (CrCM)/Boundary Conduction Mode (BCM) PFC Controllers for Lighting
- High Voltage Gate Drivers (HVIC)
- LED Drivers
- PDP Smart Power Module (PDP-SPM™)

SIGNAL PATH ICs

Amplifiers & Comparators

- Comparators
- Current Sense Amplifier
- High Performance Amplifiers (>15MHz)
- Operational Amplifiers

Battery Protection IC

- Battery Protection IC

Interface

- LVDS
- Serializer/Deserializer (µSerDes™)
- USB Transceiver

Signal Conditioning

- Triple Video DACs
- Video Filter Drivers
- Video Switch Matrix/Multiplexers

Switches

- Analog/Audio Switches
- Bus Switches
- USB Switches
- Video Switches

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