

Wibbow

ChiP DC-DC Converter (3rd Gen) Brochure



High power



High
power density



Low EMI



Parallel

CHIP3623
[38.72 x22.80 x7.21mm]



FULL CHIP
[32.5 x22.0x6.73mm]



HALF CHIP
[16.5 x22.0 x6.73mm]

CHIP4623
[47.91 x22.80 x7.21mm]



CHIP6123
[63.3 x22.8 x7.21mm]



CHIP6123
[61.0 x25.14 x7.21mm]



Introduction to ChiP DC-DC Converter

Features

ChiP DC-DC Converter is the latest generation of modular power supply products based on the revolutionary Converter housed in Package (ChiP) technology, which is applied with advanced MHz soft-switching topology, patented control strategy and packaging technology, and has such distinctive advantages as premium efficiency (97.5%), ultra-high power density (2735 W/in³), ultra-small thickness (only 6.73 mm), ultra-light weight (7.8 g), parallelling (more than 8 sets in parallel), and low EMI. Compared with the traditional module power supply, the performance indicators are improved by orders of magnitude, in which the power density is increased by 10 times and the weight is reduced to one tenth; The series also have comprehensive protections (against input over-voltage and under-voltage, output over-voltage, over-current, short circuit and over-temperature), enable control, fault monitoring and temperature monitoring functions. Typical products have passed the third-party appraisal and inspection, and are ideally for UAVs, TR components, data centers, and other highly reliable electronic systems with extremely strict requirements on power, efficiency, volume, weight and height.

Product series	Input voltage	Output voltage	Output power	Parallel expansion	Electrical characteristics	Package size	Page
WBPI28H	16~50V	5V~12V	50W	Not supported	Isolated, Regulated	22.0×16.5×6.73 mm	02
WBPI28WH	9~50V	5V~12V	25W	Not supported	Isolated, Regulated	22.0×16.5×6.73 mm	03
WBDCM28BC	16~50V	3.3V~48V	120~320W	supported	Isolated, Regulated	38.72×22.80×7.21 mm	04
WBDCM28WBC	9~50V	3.3V~28V	80~160W	supported	Isolated, Regulated	38.72×22.80×7.21 mm	05
WBDCM24BC	18~36V	5V~48V	180~320W	supported	Isolated, Regulated	38.72×22.80×7.21 mm	06
WBDCM48BC	36~75V	24V	320W	supported	Isolated, Regulated	38.72×22.80×7.21 mm	07
WBDCM270AC	160~420V	5V~28V	250~500W	supported	Isolated, Regulated	47.91×22.80×7.21 mm	08
WBDCM300AC	200~420V	12V~28V	500~600W	supported	Isolated, Regulated	47.91×22.80×7.21 mm	09
WBDCM275AC	120~420V	15V	375W	supported	Isolated, Regulated	47.91×22.80×7.21 mm	10
WBPRM28F	16~50V	24V~36V	120~500W	supported	Non-isolated, Regulated	32.5×22.0×6.73 mm	11
WBPRM36F	18~60V	48V	120W	supported	Non-isolated, Regulated	32.5×22.0×6.73 mm	12
WBPRM48BF	38~55V	48V	600W	supported	Non-isolated, Regulated	32.5×22.0×6.73 mm	13
WBVTM36F	26~50V	6V~24V	120W	supported	Isolated, Non-regulated	32.5×22.0×6.73 mm	14
WBVTM48F	26~55V	6V~12V	240~300W	supported	Isolated, Non-regulated	32.5×22.0×6.73 mm	15
WBBCM48BF	38~55V	6V~8V	240W	supported	Isolated, Non-regulated	32.5×22.0×6.73 mm	16
WBBCM384WEC	260~410V	12V~24V	1500W	supported	Isolated, Non-regulated	61.0×25.14×7.21 mm	17
WBBCM384WDC	260~410V	48V	816~1680W	supported	Isolated, Non-regulated	63.34×22.8×7.21 mm	18

WBPI28H Series ChiP DC-DC Converter

Product Features

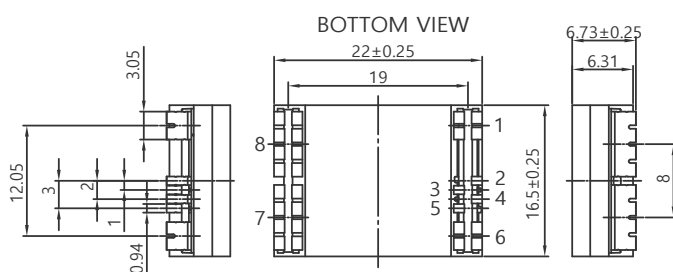
- Isolated, Regulated
- Ultra-small package
- Maximum volume power density: 334 W/in³
- Weight: only 7.8 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- 2250 Vdc isolation
- Operating temperature: -55°C~100°C
- HALF CHIP Package: 22.0×16.5×6.73mm



Product Specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPI50H-28M05LS	16~50V	5.0V	4.00~5.50V	10A	50W	85.3%	Available
WBPI50H-28M12LS	16~50V	12V	9.60~13.2V	4.2A	50W	88%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	SGND	Signal GND
3	TM	Temperature monitoring terminal
4	TRIM	Voltage regulation terminal
5	ENABLE	Enable control
6	-IN	Input negative terminal
7	-OUT	Output negative terminal
8	+OUT	Output positive terminal

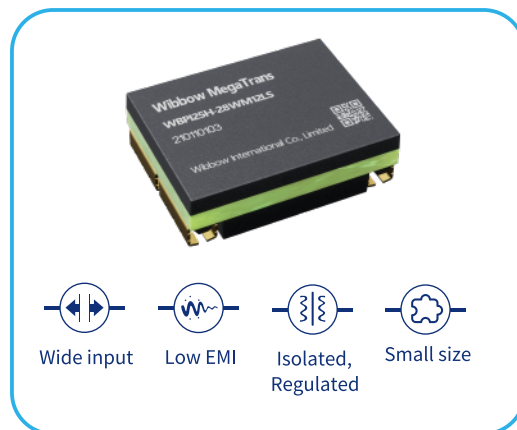
Part Numbering

WB	PI	50	H	-	28	M	05	L	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	50: 50W	H: HALF CHIP		28: 16~50V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	05: 5V 12: 12V	L: Lead type	S: Standalone

WBPI28WH Series ChiP DC-DC Converter

Product Features

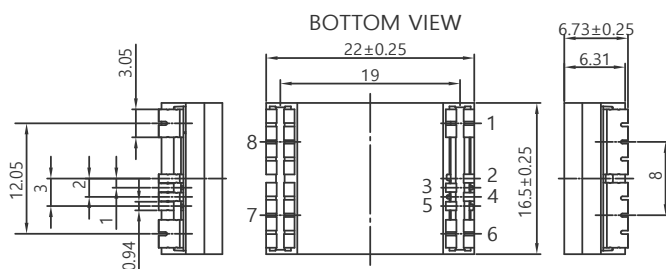
- Wide-input isolated voltage regulation: 9V-50V
- Ultra-small package
- High volume power density: 167W/in³
- High weight power density: 3.2 W/g
- Weight: only 7.8 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- 2250 Vdc isolation
- Operating temperature: -55°C~100°C
- HALF CHIP Package: 22.0 × 16.5 × 6.73mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPI25H-28WM05LS	9~50V	5V	4.0~5.50V	5A	25W	84.2%	Developing
WBPI25H-28WM12LS	9~50V	12V	9.6~13.2V	2.1A	25W	86%	Developing

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	SGND	Signal GND
3	TM	Temperature monitoring terminal
4	TRIM	Voltage regulation terminal
5	ENABLE	Enable control
6	-IN	Input negative terminal
7	-OUT	Output negative terminal
8	+OUT	Output positive terminal

Part Numbering

WB	PI	25	H	-	28W	M	05	L	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	25: 25W	H: HALF CHIP		28W: 9~50V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	05: 5V 12: 12V	L: Lead type	S: Standalone

WBDCM28BC Series ChiP DC-DC Converter

Product Features

- Isolated voltage regulation
- High volume power density: 818 W/in³
- High weight power density: 13.2 W/g
- Weight: only 24.2 g
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protection
- Supports 8 parallel expansion
- 2250 Vdc isolation
- Operating temperature: -55°C ~ 100°C
- CHIP3623 package: 38.72×22.80×7.21 mm



High power density



Low EMI



Parallel

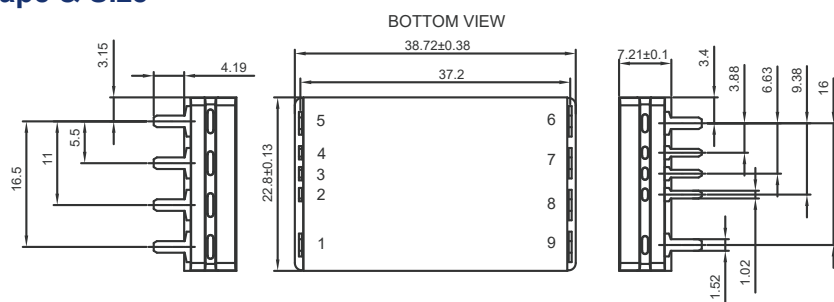


Isolated voltage regulation

Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM120BC-28M3V3TS	16~50V	3.3V	2.97~3.63V	36.3A	120W	88.5%	Available
WBDCM180BC-28M05TS	16~50V	5.0V	4.00~5.50V	36.0A	180W	90.3%	Available
WBDCM320BC-28M12TS	16~50V	12V	7.20~13.2V	26.7A	320W	92.2%	Available
WBDCM320BC-28M24TS	16~50V	24V	14.4~26.4V	13.3A	320W	93.2%	Available
WBDCM320BC-28M28TS	16~50V	28V	22.0~30.8V	11.4A	320W	93.4%	Available
WBDCM320BC-28M48TS	16~50V	48V	28.8~52.8V	6.70A	320W	93.0%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

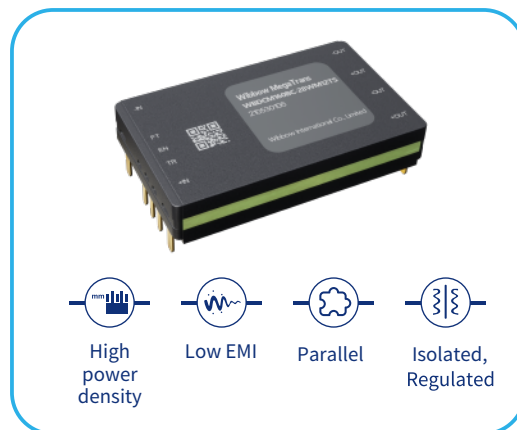
Part Numbering

WB	DCM	120	BC	-	28	M	3V3	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	120: 120W 180: 180W 320: 320W	BC: CHIP3623	-	28: 16~50V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	3V3: 3.3V 05: 5V 12: 12V 24: 24V 28: 28V 48: 48V	T: Through hole	S: Standalone P: Parallel

WBDCM28WBC Series ChiP DC-DC Converter

Product Features

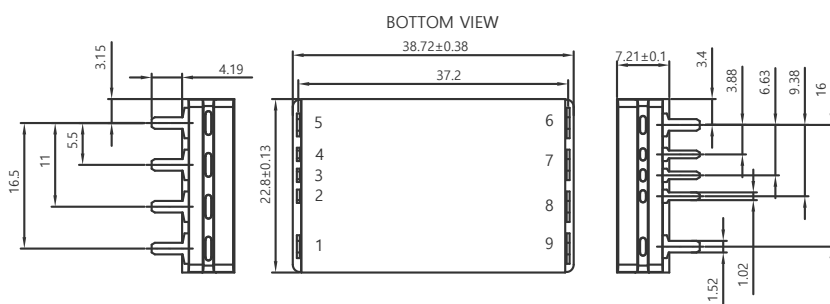
- Wide-input isolated voltage regulation
- High volume power density: 409 W/in³
- High weight power density: 6.6 W/g
- Weight: only 24.2 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- 2250 Vdc isolation
- Operating temperature: -55°C~100°C
- CHIP3623 package: 38.72×22.80×7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM80BC-28WM3V3TS	9~50V	3.3V	2.97~3.63V	24.3A	80W	87.4%	Available
WBDCM80BC-28WM05TS	9~50V	5.0V	3.5~5.5V	16A	80W	88.4%	Available
WBDCM160BC-28WM12TS	9~50V	12V	7.2~13.2V	13.4A	160W	90.8%	Available
WBDCM160BC-28WM24TS	9~50V	24V	14.4~26.4V	6.7A	160W	90.8%	Available
WBDCM160BC-28WM28TS	9~50V	28V	16.8~30.8V	5.8A	160W	91.0%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

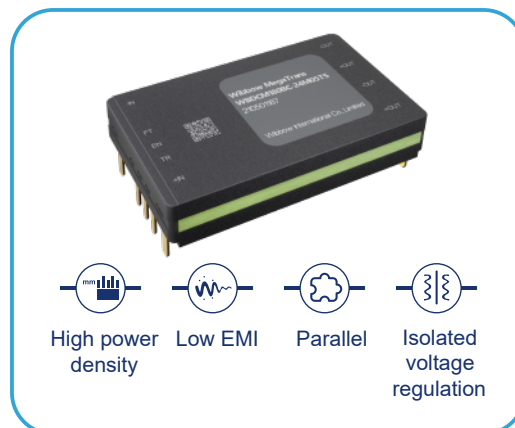
Part Numbering

WB	DCM	80	BC	-	28W	M	3V3	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	80: 80W 160: 160W	BC: CHIP3623		28W: 9~50 V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	3V3: 3.3V 05: 5V 12: 12V 24: 24V 28: 28V	T: Through hole	S: Standalone P: Parallel

WBDCM24BC Series ChiP DC-DC Converter

Product Features

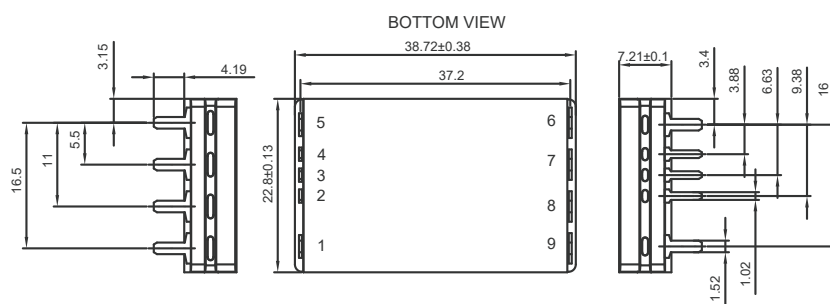
- Isolated voltage regulation
- High volume power density: 818 W/in³
- High weight power density: 13.2 W/g
- Weight: only 24.2 g
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protections
- Supports 8 parallel expansion
- 2250 Vdc isolation
- Operating temperature: -55°C ~ 100°C
- CHIP3623 package: 38.72 × 22.80 × 7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM180BC-24M05TS	18~36V	5.0V	4.0~5.5V	36A	180W	91.9%	Available
WBDCM320BC-24M24TS	18~36V	24V	14.4~26.4V	13.3A	320W	91.5%	Developing
WBDCM320BC-24M28TS	18~36V	28V	16.8~30.8V	11.4A	320W	93.1%	Developing
WBDCM320BC-24M36TS	18~36V	36V	21.6~39.6V	8.8A	320W	93.0%	Available
WBDCM320BC-24M48TS	18~36V	48V	28.8~52.8V	6.7A	320W	92.0%	Available

Overall dimensions



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

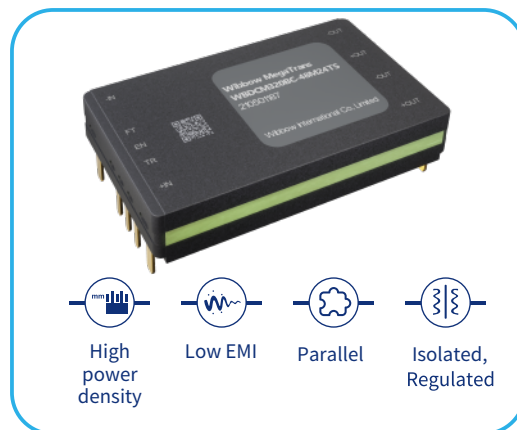
Naming rule

WB	DCM	180	BC	-	24	M	05	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	180:180W 320:320W	BC: CHIP3623		24:18~36V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	05:5V 24:24V 28:28V 36:36V 48:48V	T: Through hole	S: Standalone P: Parallel

WBDCM48BC Series CHiP DC-DC Converter

Product Features

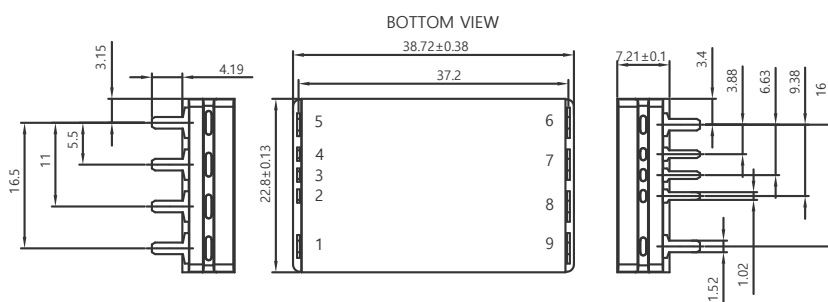
- Isolated voltage regulation
- High volume power density: 818 W/in³
- High weight power density: 13.2 W/g
- Weight: only 24.2 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- 2250Vdc isolation
- Operating temperature: -55°C~100°C
- CHIP3623 package: 38.72 x22.80x7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM320BC-48M24TS	36~75V	24V	14.4~26.4V	13.3A	320W	91.0%	Developing

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

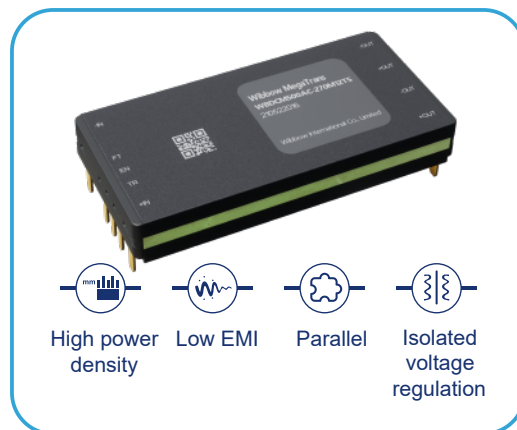
Part Numbering

WB	DCM	320	BC	-	48	M	24	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	320: 320W	BC: CHIP3623		48:36~75V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	24:24V	T: Through hole	S: Standalone P: Parallel

WBDCM270AC Series ChiP DC-DC Converter

Product Features

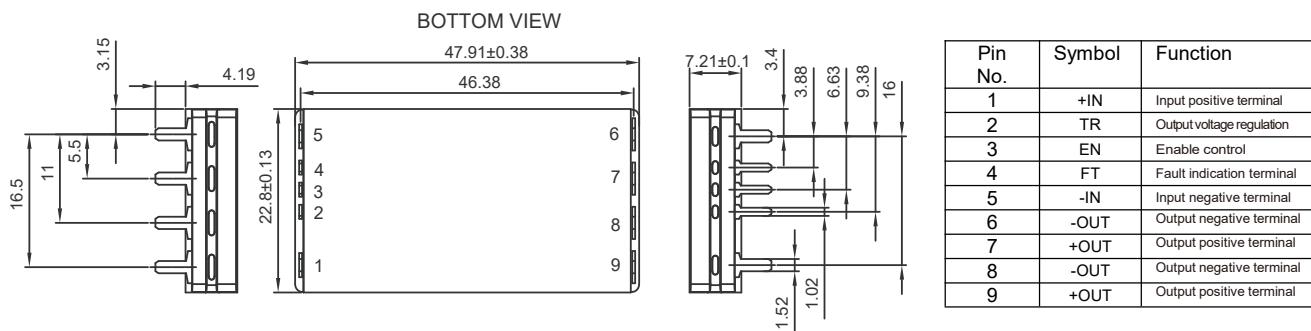
- Wide input isolated voltage regulation: 160V~420V
- High volume power density: 1040 W/in³
- High weight power density: 17.4 W/g
- Weight: only 28 g
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protections
- Supports 8 parallel expansion
- 4242 Vdc isolation
- Operating temperature: -55°C~ 100°C
- CHIP4623 package: 47.91 × 22.80 × 7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM250AC-270M05TS	160~420V	5V	4.0~5.5V	50A	250W	89.1%	Developing
WBDCM500AC-270M12TS	160~420V	12V	7.2~13.2V	41.67A	500W	91.1%	Available
WBDCM500AC-270M15TS	160~420V	15V	9.0~16.5V	33.4A	500W	91.8%	Developing
WBDCM500AC-270M28TS	160~420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available

Overall dimensions



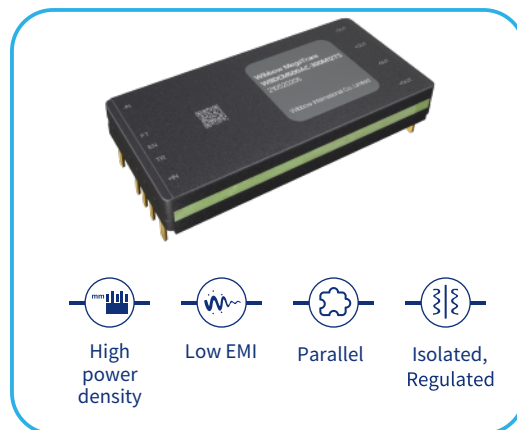
Part Numbering

WB	DCM	250	AC	-	270	M	05	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	250: 250W 500: 500W	AC:CHIP 4623		270:160~420V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	05:5V 12:12V 15:15V 28:28V	T: Through hole	S: Standalone P: Parallel

WBDCM300AC Series ChiP DC-DC Converter

Product Features

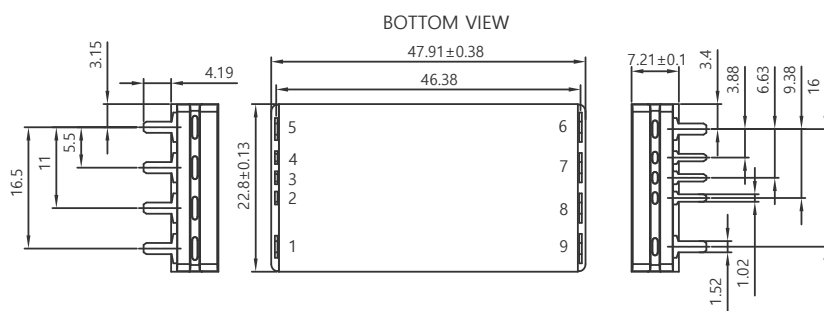
- Wide input isolated voltage regulation: 200V-420V
- High volume power density: 1040W/in³
- High weight power density: 17.4 W/g
- Weight: only 28 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55°C~100°C
- CHIP4623 package: 47.91 x22.80x7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM500AC-300M12TS	200~420V	12V	7.2~13.2V	41.67A	500W	91.1%	Available
WBDCM500AC-300M15TS	200~420V	15V	9.0~16.5V	33.4A	500W	91.8%	Developing
WBDCM500AC-300M24TS	200~420V	24V	14.4~26.4V	20.84A	500W	92.6%	Developing
WBDCM600AC-300M24TS	200~420V	24V	14.4~26.4V	25A	600W	92.6%	Available
WBDCM500AC-300M28TS	200~420V	28V	16.8~30.8V	17.86A	500W	93.2%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

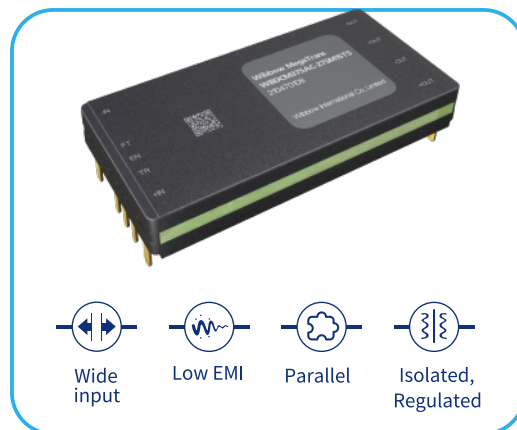
Part Numbering

WB	DCM	500	AC	-	300	M	12	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	500:500W 600:600W	AC:CHIP 4623		300:200~420V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	12:12V 15:15V 24:24V 28:28V	T: Through hole	S: Standalone P: Parallel

WBDCM275AC Series ChiP DC-DC Converter

Product Features

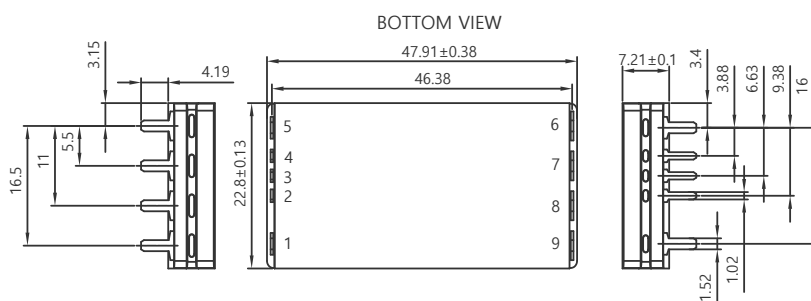
- Ultra-wide-input isolated voltage regulation: 120V-420V
- High volume power density: 1040 W/in³
- High weight power density: 17.4 W/g
- Weight: only 28 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- 4242Vdc isolation
- Operating temperature: -55°C~100°C
- CHIP4623 package: 47.91 x22.80x7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBDCM375AC-275M15TS	120~420V	15V	9.0~16.5V	25A	375W	90.1%	Developing

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TR	Output voltage regulation
3	EN	Enable control
4	FT	Fault indication terminal
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

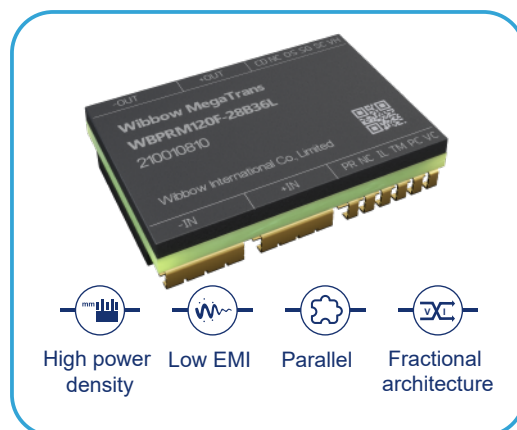
Part Numbering

WB	DCM	375	AC	-	275	M	15	T	S
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type	Optimized for
Wibbow	Isolated voltage regulation Microchip series	375:375W	AC:CHIP 4623		275:120~420V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	15:15V	T: Through hole	S: Standalone P: Parallel

WBPRM28F Series ChiP DC-DC Converter

Product Features

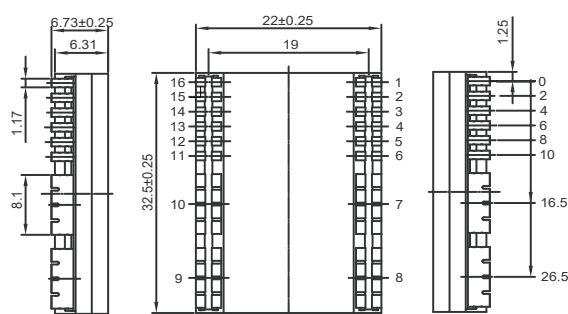
- Wide input and wide output
- Maximum volume power density: 1702.7 W/in³
- Maximum weight power density: 31.25 W/g
- Weight: 16 g only
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protections
- Supports 5 parallel expansion
- Cascading WBVTM to form a factorized architecture
- Operating temperature: -55°C ~ 100°C
- FULL CHIP package: 32.5 × 22.0 × 6.73 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPRM120F-28M36L	16~50V	36V	26~50V	3.33A	120W	95.5%	Available
WBPRM500F-28M24L	16~50V	24V	20~40V	20.8A	500W	95%	Available

Shape & Size



WBPRM120F-28M36L

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	VC	VTM control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TM	Dead end	11	CD	Voltage compensation
4	IL	Current limiting setting	12	NC	Dead end
5	NC	Dead end	13	OS	Output voltage setting
6	PR	Parallel control	14	SG	Signal ground
7	+IN	Input positive terminal	15	SC	Secondary side control terminal
8	-IN	Input negative terminal	16	VH	Auxiliary source

WBPRM500F-28M24L

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	PR	Parallel control	9	-OUT	Output negative terminal
2	PC	Primary side control terminal	10	+OUT	Output positive terminal
3	TRIM	Output voltage setting	11	VC	VTM control
4	NC	Dead	12	RE	Outer loop reference
5	NC	Dead	13	SG	Signal ground
6	AL	Adaptive loop control	14	IF	Current monitoring
7	+IN	Input positive terminal	15	VS	Auxiliary source
8	-IN	Input negative terminal	16	VT	VTM temperature compensation

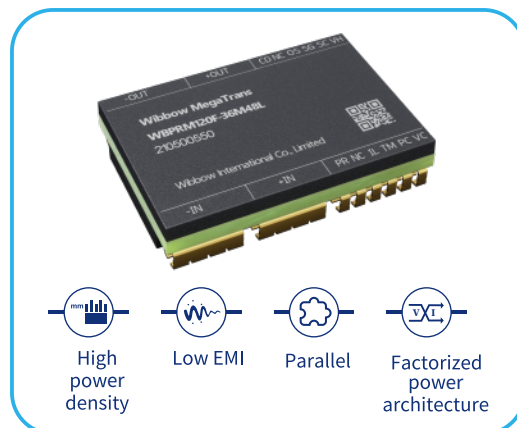
Part Numbering

WB	PRM	120	F	-	28	M	36	L
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Pre-regulated Microchip series	120: 120W 500: 500W	F: FULL CHIP		28: 16~50V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	24: 24V 36: 36V	L: Lead type T: Through hole

WBPRM36F Series ChiP DC-DC Converter

Product Features

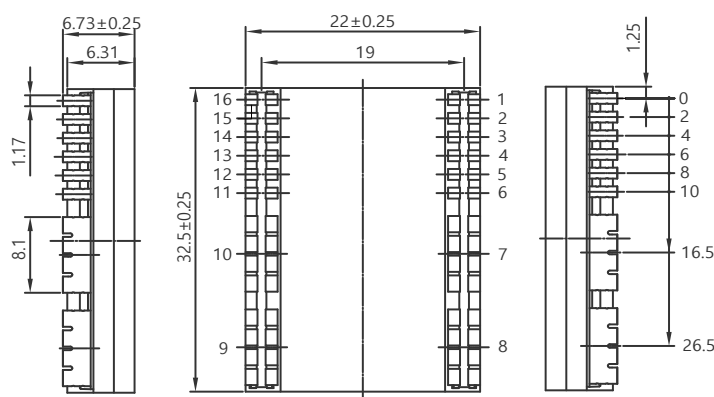
- Wide input and wide output
- Maximum volume power density: 817.3W/in³
- Maximum weight power density: 37.5 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 5 parallel expansion
- Cascading WBVTM to form a factorized architecture
- Operating temperature: -55°C~100°C
- FULL CHIP package: 32.5 x22.0x6.73 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPRM120F-36M48L	18~60V	48V	26~55V	2.5A	120W	95.0%	Available

Shape & Size



Pin No.	Label	Function	Pin No.	Label	Function
1	VC	VTM control	9	-OUT	Output negative terminal
2	PC	Primary side control	10	+OUT	Output positive terminal
3	TM	Null	11	CD	Voltage compensation
4	IL	Current limiting setting	12	NC	Null
5	NC	Null	13	OS	Output voltage range setting
6	PR	Parallel control	14	SG	Signal GND
7	+IN	Positive input power terminal	15	SC	Secondary side control terminal
8	-IN	Input negative terminal	16	VH	Auxiliary source

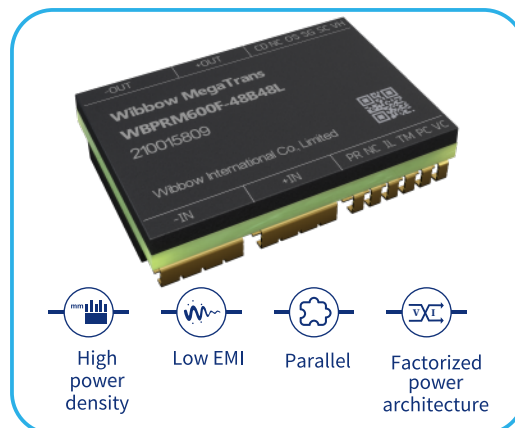
Part Numbering

WB	PRM	120	F	-	36	M	48	L
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Pre-regulated Microchip series	120: 120W	F: FULL CHIP		36: 18~60V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	48: 48V	L: Lead type T: Through hole

WBPRM48BF Series ChiP DC-DC Converter

Product Features

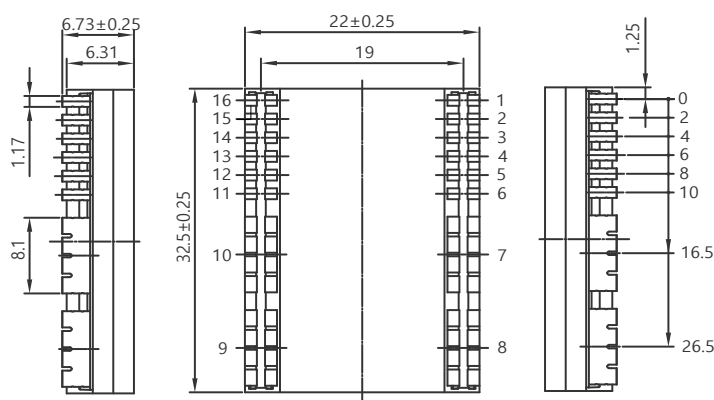
- Adjustable ultra-wide output voltage range
- Maximum volume power density: 2035W/in³
- Maximum weight power density: 37.5 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 5 parallel expansion
- Cascading WBVTM to form a factorized architecture
- Operating temperature: -55°C~100°C
- FULL CHIP package: 32.5 x22.0x6.73 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBPRM600F-48BM48L	38~55V	48V	5~55V	12.5A	600W	97.0%	Developing

Shape & Size



Pin No.	Label	Function	Pin No.	Label	Function
1	VC	VTM control	9	-OUT	Output negative terminal
2	PC	Primary side control	10	+OUT	Output positive terminal
3	TM	Null	11	CD	Voltage compensation
4	IL	Current limiting setting	12	NC	Null
5	NC	Null	13	OS	Output voltage range setting
6	PR	Parallel control	14	SG	Signal GND
7	+IN	Positive input power terminal	15	SC	Secondary side control terminal
8	-IN	Input negative terminal	16	VH	Auxiliary source

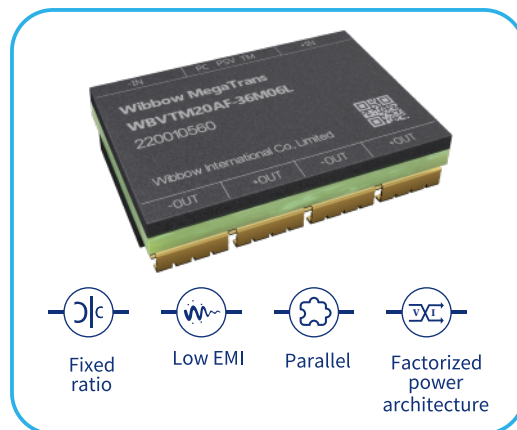
Part Numbering

WB	PRM	600	F	-	48B	M	48	L
Brand name	Series name	Output power	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Pre-regulated Microchip series	600: 600W	F: FULL CHIP		48B: 38~55V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	48: 48V	L: Lead type T: Through hole

WBVTM36F Series ChiP DC-DC Converter

Product Features

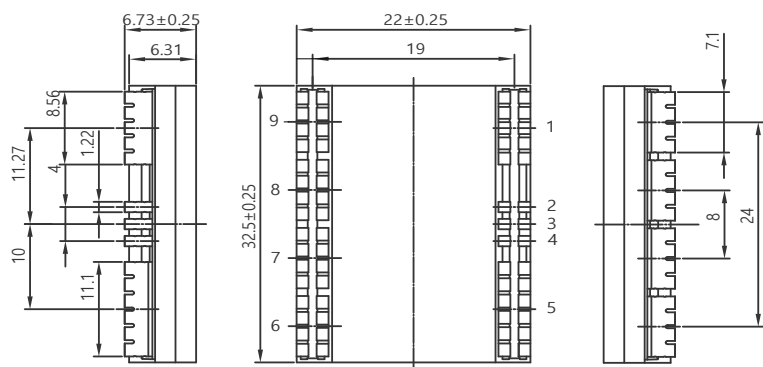
- Isolated fixed voltage ratio
- High volume power density: 557W/in³
- High weight power density: 10.9 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- Cascading WBPRM to form a factorized architecture
- Operating temperature: -55°C~100°C
- FULL CHIP package: 32.5 x22.0x6.73 mm



Product specification

Product module	Input voltage	Output voltage	Conversion ratio	Output current	Output power	Efficiency	Development progress
WBVTM20AF-36M06L	26~50V	6V	6:1	20A	120W	95%	Available
WBVTM05AF-36M24L	26~50V	24V	3:2	5A	120W	96%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature measurement
3	VC	Modular control
4	PC	Primary side control
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Part Numbering

WB	VTM	20A	F	-	36	M	06	L
Brand name	Series name	Output	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Isolated unregulated Microchip series	20A: 20A 05A: 5A	F: FULL CHIP		36: 26~50V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	06: 6V 24: 24V	L: Lead type T: Through hole

WBVTM48F Series ChiP DC-DC Converter

Product Features

- Isolated fixed voltage ratio
- High volume power density: 1114 W/in³
- High weight power density: 22 W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protections
- Supports 8 parallel expansion
- Cascading WBPRM to form a factorized architecture
- Operating temperature: -55°C ~ 100°C
- FULL CHIP package: 32.5 × 22.0 × 6.73 mm



Fixed
transformation
ratio



Low EMI



Parallel

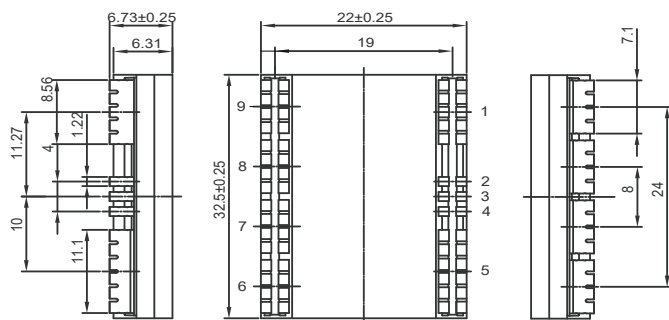


Fractional
architecture

Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBVTM40AF-48M06L	26~55V	6V	8:1	40A	240W	94.6%	Available
WBVTM25AF-48M12L	26~55V	12V	4:1	25A	300W	95.8%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature detection
3	VC	Module control
4	PC	Primary side control
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

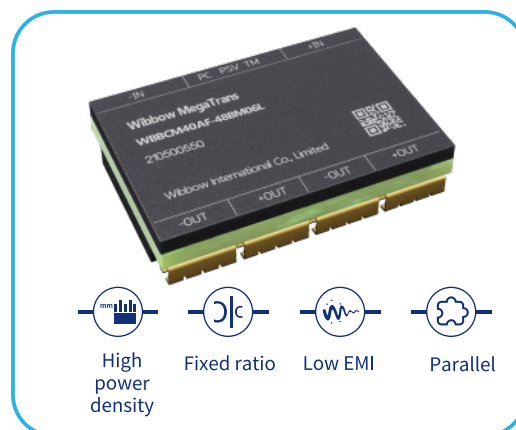
Part Numbering

WB	VTM	40A	F	-	48	M	06	L
Brand name	Series name	Output	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Isolated unregulated Microchip series	40A: 40A 25A: 25A	F: FULL CHIP		48: 26~55V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	06: 6V 12: 12V	L: Lead type T: Through hole

WBBCM48BF Series ChiP DC-DC Converter

Product Features

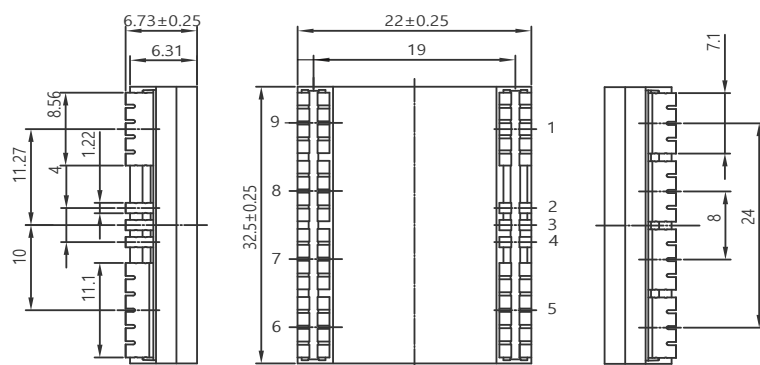
- Isolated fixed voltage ratio
- High volume power density: 1114W/in³
- High weight power density: 22W/g
- Weight: only 16 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- Operating temperature: -55°C~100°C
- FULL CHIP package: 32.5 x22.0x6.73 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBBCM40AF-48BM06L	38~55V	6V	8:1	40A	240W	94.7%	Available
WBBCM30AF-48BM08L	38~55V	8V	6:1	30A	240W	95.6%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature measurement
3	RSV	Null
4	PC	Primary side control
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Part Numbering

WB	BCM	40A	F	-	48B	M	06	L
Brand name	Series name	Output	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Isolated unregulated Microchip series	40A: 40A 30A: 30A	F: FULL CHIP		48B: 38~55V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	06: 6V 08: 8V	L: Lead type T: Through hole

WBBCM384WEC Series ChiP DC-DC Converter

Product Features

- High voltage wide input isolated fixed transformation ratio
- High volume power density: 2352 W/in³
- High weight power density: 40 W/g
- Weight: only 41 g
- Over-voltage, under-voltage, over-current, short circuit, and over-temperature protections
- Supports 8 parallel expansion
- Support two-way operation
- Operating temperature: -55°C ~ 100°C
- CHIP6123 package: 61.0 x25.14x7.21 mm



High
power
density



Fixed
transforma
tion ratio



Low EMI

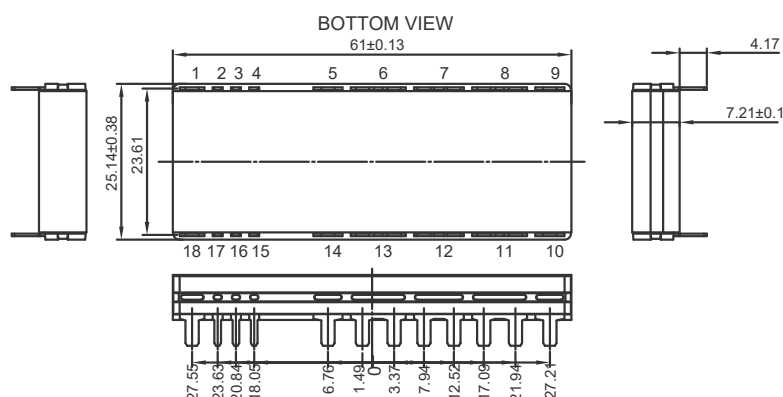


Parallel

Product specification

Product module	Input voltage	Output voltage	Voltage transformation ratio	Output current	Output power	Efficiency	Development progress
WBBCM125AEC-384WM12T	260~410V	12V	32:1	125A	1500W	96.4%	Available
WBBCM62A5EC-384WM24T	260~410V	24V	16:1	62.5A	1500W	96.4%	Available

Shape & Size



Pin No.	Symbol	Function
1	-IN	Input negative terminal
2	VAUX	Auxiliary source terminal
3	EN	Enable terminal
4	TM	Temperature monitoring terminal
5,7,9,10,12,14	+OUT	Output positive terminal
6,8,11,13	-OUT	Output negative terminal
15,16,17,18	+IN	Input positive terminal

Part Numbering

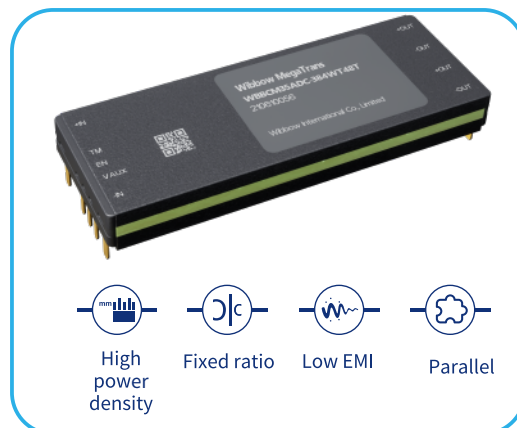
WB	BCM	125A	EC	-	384W	M	12	T
Brand name	Series name	Output	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Isolated unregulated Microchip series	125A: 125A	EC: CHIP6123 Pin-out on long side		384W: 260~410V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	12: 12V	T: Through hole

WBBCM384WDC Series

ChiP DC-DC Converter

Product Features

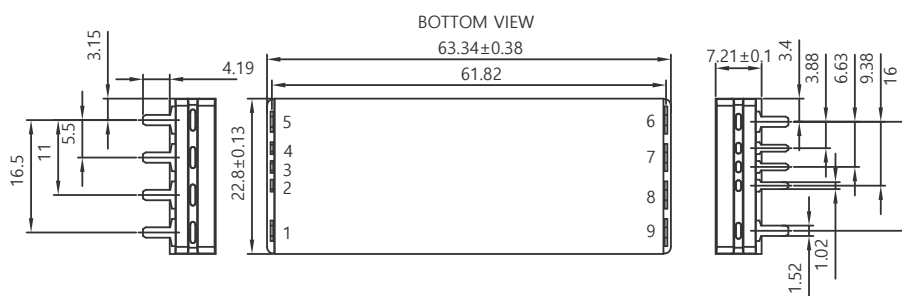
- High voltage wide input isolated fixed transformation ratio
- High volume power density: 2735W/in³
- High weight power density: 42.7 W/g
- Weight: only 41 g
- Over-voltage, under-voltage, over-current, short-circuit and over-temperature protections
- Supports 8 parallel expansion
- Support two-way operation
- Operating temperature: -55°C~100°C
- CHIP6123 package: 63.3 x22.8x7.21 mm



Product specification

Product module	Input voltage	Output voltage	Adjustable range	Output current	Output power	Efficiency	Development progress
WBBCM17ADC-384WM48T	260~410V	48V	8:1	17A	816W	97.5%	Developing
WBBCM35ADC-384WM48T	260~410V	48V	8:1	35A	1680W	96.6%	Available

Shape & Size



Pin No.	Symbol	Function
1	+IN	Input positive terminal
2	TM	Temperature measurement
3	EN	Enable control
4	VAUX	Auxiliary source
5	-IN	Input negative terminal
6	-OUT	Output negative terminal
7	+OUT	Output positive terminal
8	-OUT	Output negative terminal
9	+OUT	Output positive terminal

Part Numbering

WB	BCM	17A	DC	-	384W	M	48	T
Brand name	Series name	Output	Package	-	Input voltage	Temperature Grade	Output Voltage	Pin type
Wibbow	Isolated unregulated Microchip series	17A: 17A 35A: 35A	DC: CHIP6123 (Pin-out on short side)	-	384W: 260~410V	M: Tc: -55~100°C Ts: -65~125°C H: Tc: -40~100°C Ts: -55~125°C T: Tc: -40~100°C Ts: -40~125°C	48:48V	T: Through hole



+7 812 325-09-72
8 800 301-96-04
info@fregat.ru
fregat.ru