On Board Charging system for xEV

Contributing for CO_2 reduction by xEV spreads with convenience improvement of customer

Benefits

- Customer satisfaction improvement by charging time reduction
  - Input voltage: Worldwide (100V-240V/Single, 3phases)
  - Output power: 6.6kW, 7.4kW, 9.6kW, 11kW, 22kW

Technical Advantages

- Various production lineup
  - High Frequency Drive: Small size & High power
  - Optimized design: Heat dissipation & EMC
- Evaluation simulation model*
  - Design quality up for multiple variants
  - Expanding production lineup

Applications

- Series production results for JP/EU OEM (US/EU/JP/CHN market)
- Deliver standard OBC to proper xEV segment*
  - Stand-alone OBC
  - Module type OBC

*Next generation

	Product lineup (in Series Production)					Next generation (in Development)	
Function	4 in 1 (OBC+DCDC+J/B+DC Charge)	OBC	2 in 1 (OBC+DCDC)	OBC	OBC	OBC for X in 1 (Stand alone)	OBC for X in 1 (Module)
SOP	CY2012	CY2018	CY2020	CY2021	CY2022	CY2027	
Charge Power	6.6 kW	7.4 kW	11 kW	9.6/11 kW	22 kW	11 kW	11 kW
Power Density	0.55 kW/L	1.3 kW/L	1.6 kW/L	1.6 kW/L	1.9 kW/L	A:1.9 kW / L* B:1.0 kW / L*	A: 2.2 kW / L* B: 1.3 kW / L*
Output Voltage	300-430V	175-470V	235-470V	235-470V	235-470V	480-850V	250-470V
Efficiency	OBC : 94% DCDC : 92%	95%	OBC : 94% DCDC : 94%	95%	96%	97-98%*	

*Target specification A: Stuck structure / B: Low height structure