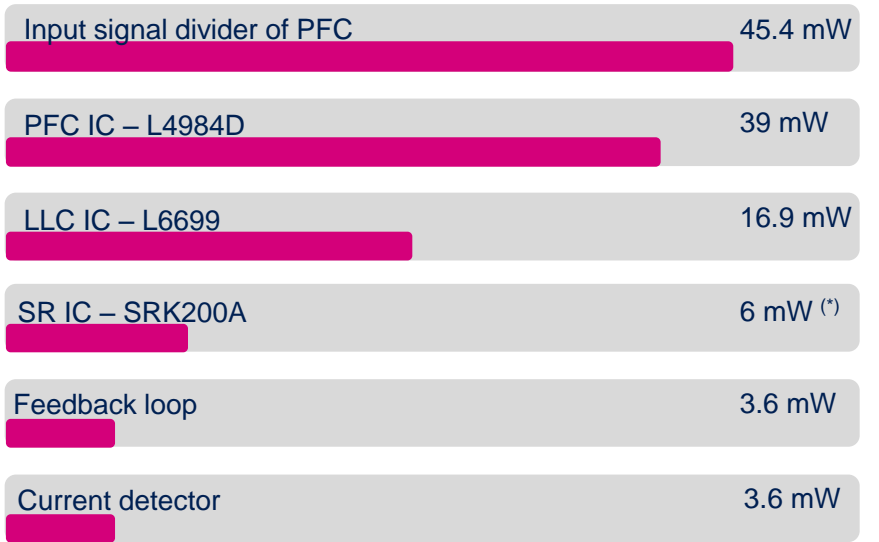


light-load power consumption and efficiency

- Light-load efficiency improved by **synchronized Burst mode** function of both L4984D and L6699 and by **self-adaptive deadtime** of L6699

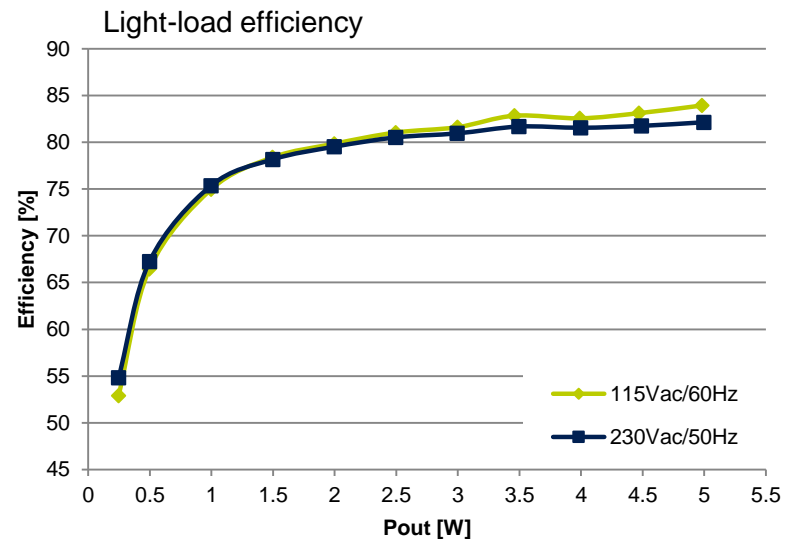
Power losses calculation with 250 mW load



Total power consumption 364.5 mW (**)

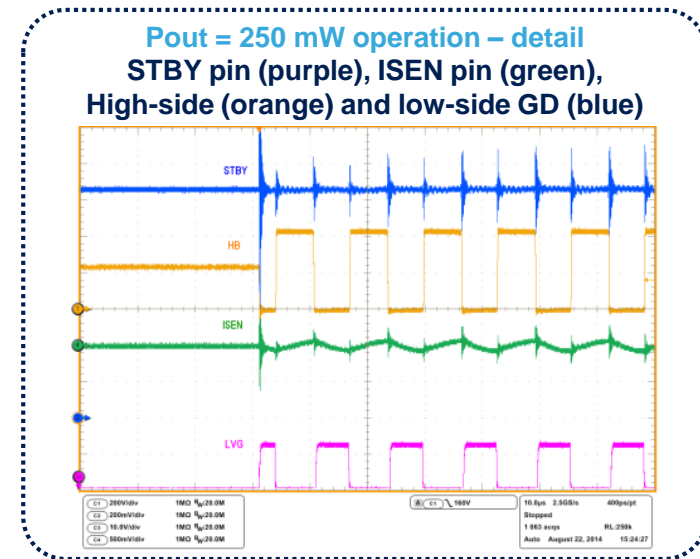
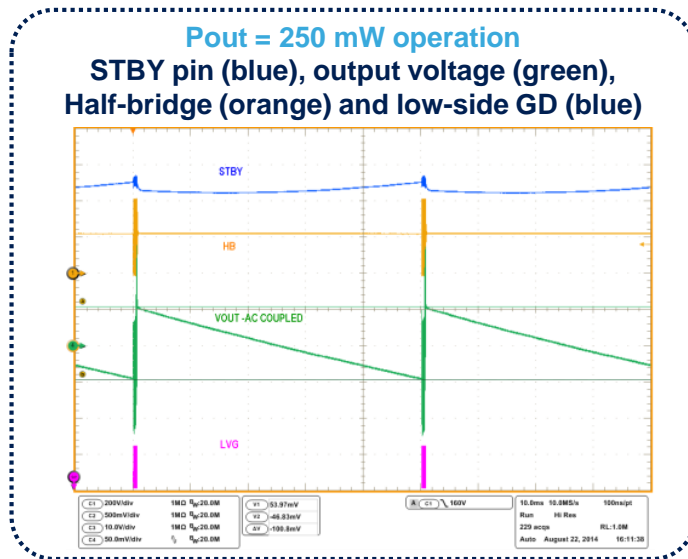
(*) <1 mW with SRK2001 option

(**) Not including switching and magnetic losses, input rect. and filter losses



EVL400W – ADP/ATX

Burst mode operation at light load



The burst pulses are very narrow and their period is quite long

The resulting equivalent switching frequency is very low, approximately 80 kHz, ensuring high efficiency

The first initial pulse is shorter than the others

No high current peak at half bridge operation restarting

EVL400W – ADP/ATX: Verification of Ecodesign requirements

ENERGY STAR® requirements for computers ver. 6.1: PASS

	Test results		Limits
	115 Vac - 60 Hz	230 Vac - 50 Hz	
Efficiency @ 20 % load	92.10%	92.85%	>82%
Efficiency @ 50 % load	91.01%	94.06%	>85%
Efficiency at 100 % load	88.22%	91.06%	>82%
Power factor	0.9963	0.9794	>0.9

Test results		Limits	
115 Vac - 60 Hz	230 Vac - 50 Hz		
90.67%	92.86%	>87%	Avg. efficiency measured at 25%, 50%, 75%, 100% (*)
52.90%	54.80%	>50%	Efficiency @ 250 mW load
35.00%	36.00%	>33%	Efficiency @ 100 mW load (*)

EuP Lot 6 Tier2 requirements: PASS

(*) Source of requirement: ST's customers

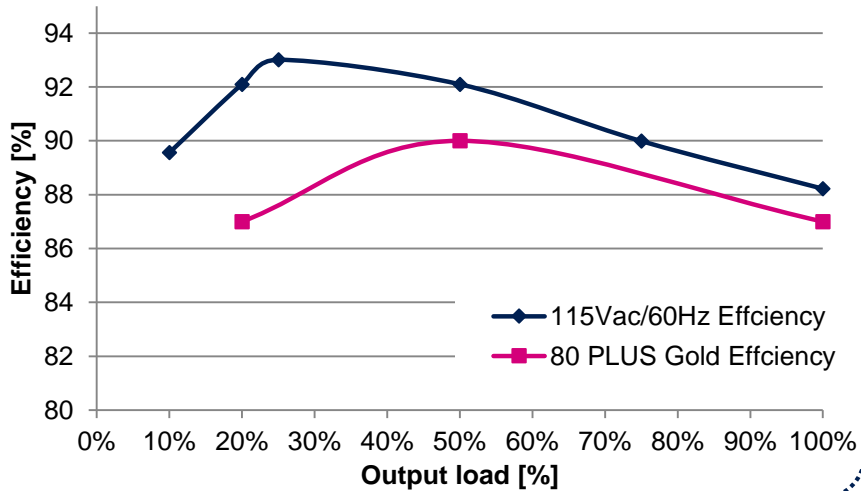
	Test results		Limits
	115 Vac - 60 Hz	230 Vac - 50 Hz	
Avg. Efficiency measured at 25%, 50%, 75%, 100%	90.67%	92.86%	>89%
Efficiency @ 10% load	89.56%	90.56%	>79%
No Load Input Power [W]	0.129 W	0.143 W	< 0.15 W

European CoC ver. 5 Tier2 requirements for external power supplies: PASS

EVL400W – ADP/ATX: Efficiency measurements

80 Plus-GOLD requirements: **PASS**

115 V_{AC} / 60 Hz efficiency



230 V_{AC} / 50 Hz efficiency

