



Extending LYTSwitch™6 IC Families With GaN Switches

September 3, 2019



LYTSwitch6 ICs with GaN Achieve >100 W

- **LYTSwitch-6 silicon transistors are highly effective up to 65 W**
 - ▶ Size 8 is the lowest $R_{DS(ON)}$ silicon MOSFET that will fit in the InSOP-24 package
- **PI GaN switches provide more power**
 - ▶ Lower $R_{DS(ON)}$ per unit area
 - ▶ Lower switching losses
- **LYTSwitch6 GaN families**
 - ▶ LYT6079C – Up to 100 W power
 - ▶ LYT6070C – Up to 110 W power

Part Number	277 VAC +/-15%	85-305VAC	380 VDC / 450 VDC
	Open Frame	Open Frame	Open Frame
LYT6063C/6073C	15 W	12 W	25 W
LYT6065C/6075C	30 W	25 W	40 W
LYT6067C/6077C	50 W	45 W	60 W
LYT6068C	65 W	55 W	
LYT6079C	85 W	75 W	100 W
LYT6070C	95 W	85 W	110 W

GaN switches

Ideal for Applications that Require Small Size and High Efficiency

- Driver for low-profile flat LED ceiling panels
- Low and high bay fixtures
- Driver for LED street light
- Industrial 12 V / 24 V constant voltage power

Easy-to-Use GaN Switch

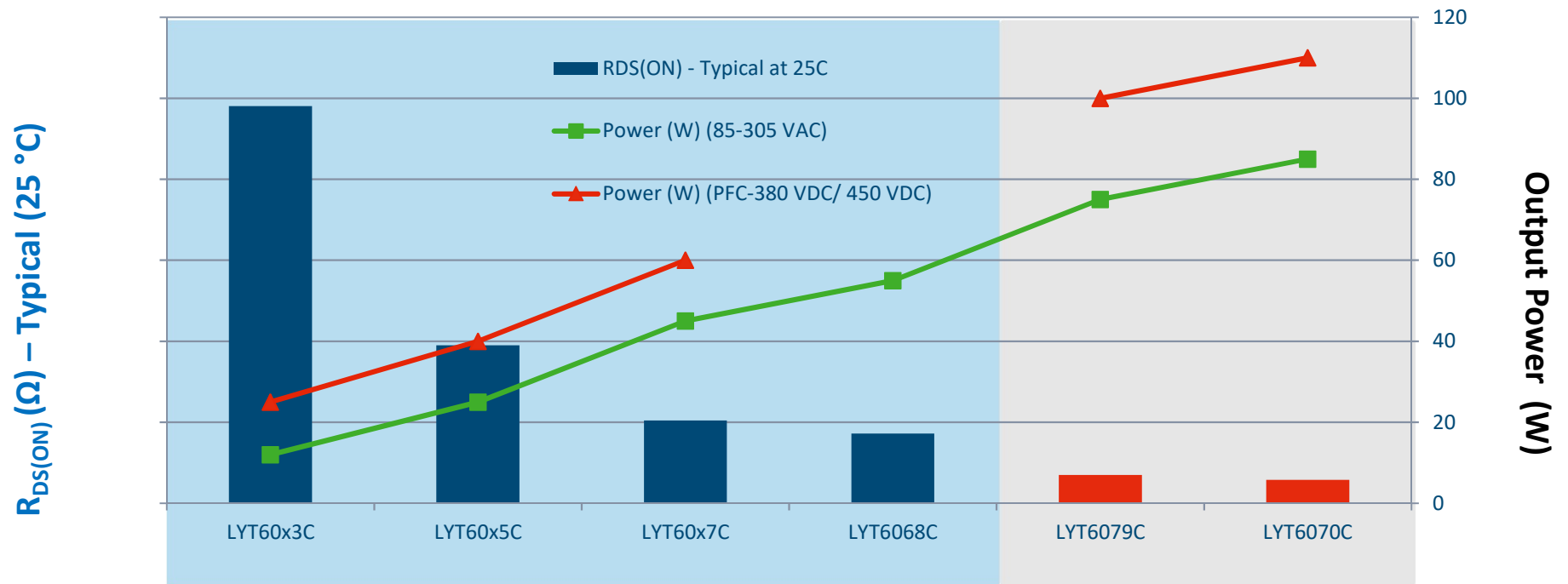
- **GaN transistors are better than silicon**
 - ▶ More efficient, cooler, smaller power supplies
 - ▶ Leading the way to “no-heatsink” designs at high power levels
- **GaN transistor technology is the future for power conversion**
- **GaN switch enclosed and protected the within IC**
 - ▶ Controller, driver, GaN-switch, protection, SR control in one device
 - ▶ Significant performance improvement compared to conventional switch
 - ▶ Operation is the same as with other LYTSwitch-6 devices



GaN Increases Performance of Industry-Leading LYTSwitch-6 ICs



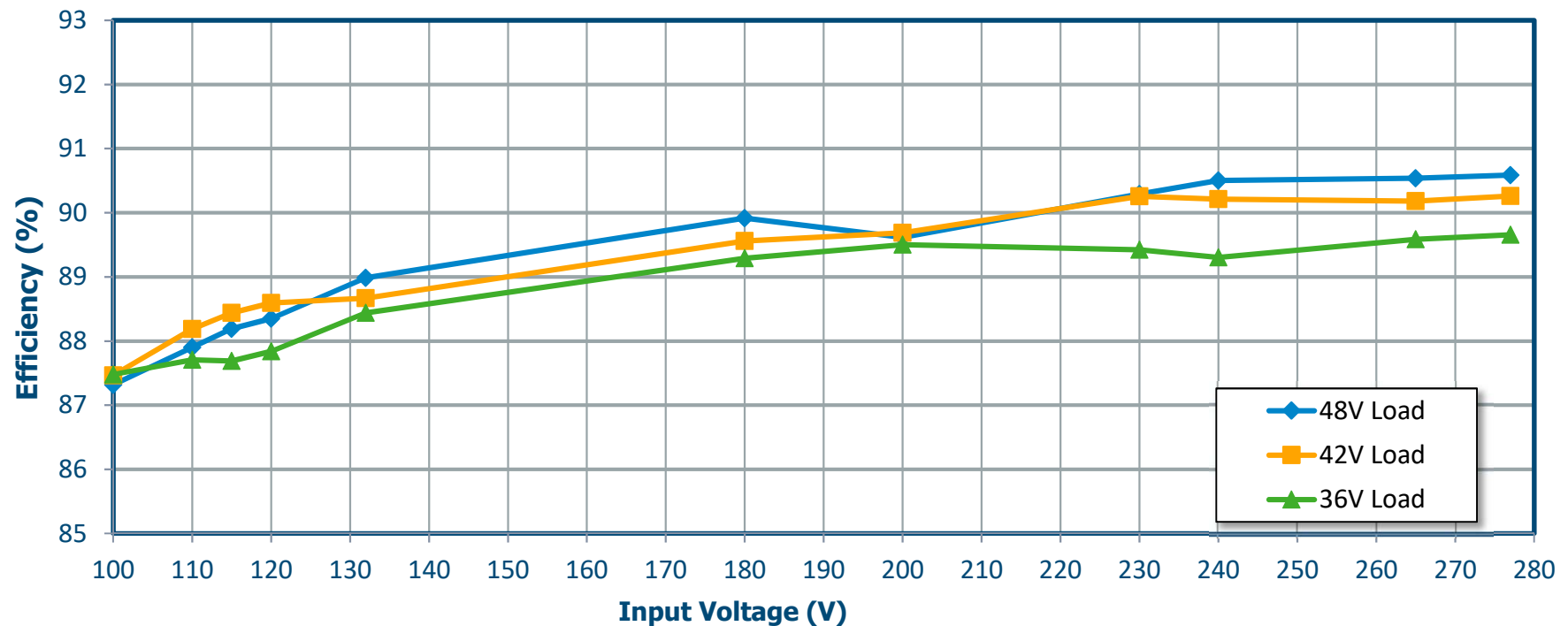
GaN Increases Efficiency and Power



Wide Power Range and High $V_{DS(MAX)}$

Product	Universal Rating (W)	PFC Input (W)	LYTSwitch6		
	85-305 VAC	380-450 VDC	650 V	725 V	750 V
LYT60y3C	12	25	✓	✓	
LYT60y5C	25	40	✓	✓	
LYT60y7C	45	60	✓	✓	
LYT60y8C	55		✓		
LYT60y9C	75	100			✓
LYT60y0C	85	110			✓

GaN-Based LYTSwitch-6 Design Achieves 90.5% Full-Load Efficiency - Eliminates Heatsink from LED Driver

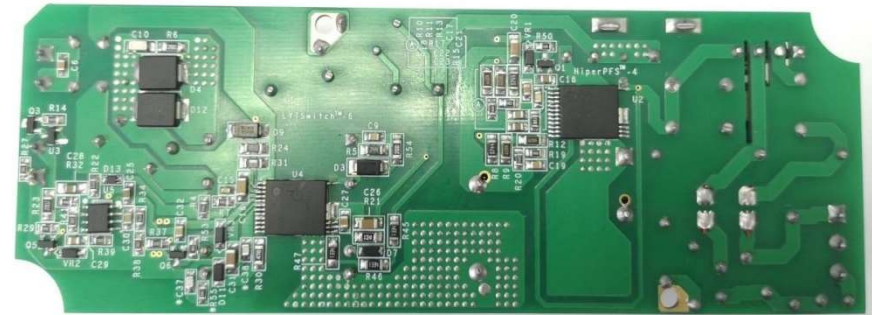


DER-801 (100 W, 48 V LED Driver): Full-load efficiency is 90.5% at 277 VAC

GaN Reference Designs Available Now

- **LYTSwitch6 for LED Driver designs**

- ▶ DER-801: 100 W



DER-801

PI Expert Now Supports GaN Devices

- **Creates real-time custom solutions that match customer specifications**

- ▶ Provides design that is fully functional across operating conditions, start-up & overload
- ▶ Complete schematic –including EMI filtering and heatsinking guidance
- ▶ Bill of material is user-adjustable to accommodate preferred components
- ▶ Transformer documentation and full build information

- **Free download from PI website**

PI Expert™
Online 



LYTSwitch-6 GaN – Powerful, Efficient, Reliable

- **LYT6079C and LYT6070C deliver more power**
 - ▶ Reduced on-resistance
 - ▶ Lower switching loss
- **Operation indistinguishable LYTSwitch-6 silicon devices**
- **100W solution without heatsink now achievable by LYTSwitch-6 GaN (DER-801)**
- **Industry-leading GaN qualification process**



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