

FOR ENERGY EFFICIENT INNOVATIONS

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## **Strata low voltage DC-DC evaluation boards series**

June 2020



Internal Use Only



# Strata low voltage DC-DC evaluation boards series

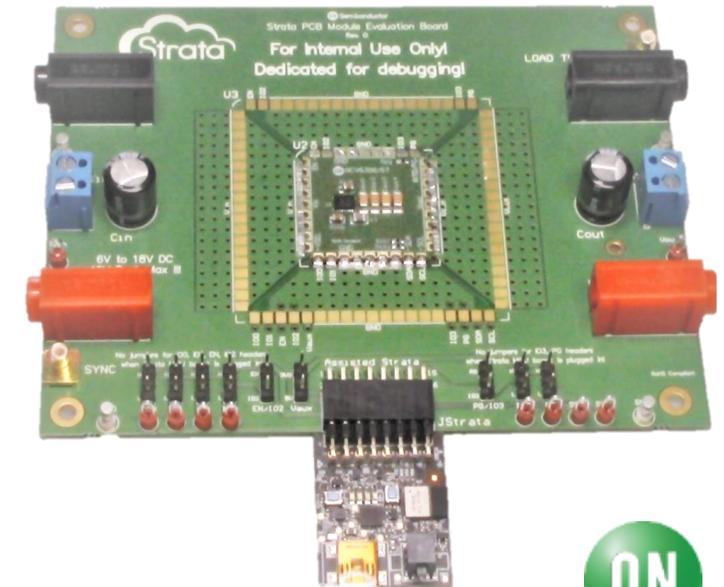
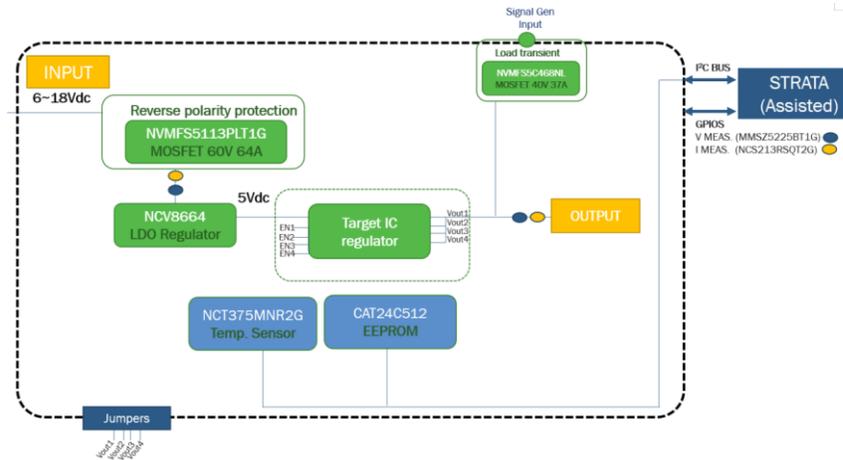
The Strata low voltage DC-DC evaluation boards series is an evaluation environment for low voltage DC-DC conversion controllers, converters and regulators. The boards feature 12 V battery connected devices for primary voltage regulation, as well as lower voltage devices for post-regulation stages. The platforms are compatible with the Strata Developer Studio, providing a Graphical User Interface for an agile start-up and fast component evaluation. The environment can be used for Automotive but also for Industrial developments. Example of DC-DC conversion devices available in this series are: the NCV81599 Automotive Buck Boost Controller, the NCV6356 Automotive Adaptive On-Time Buck Converter or the NCV8177 high PSRR Linear Regulator.

## Main features

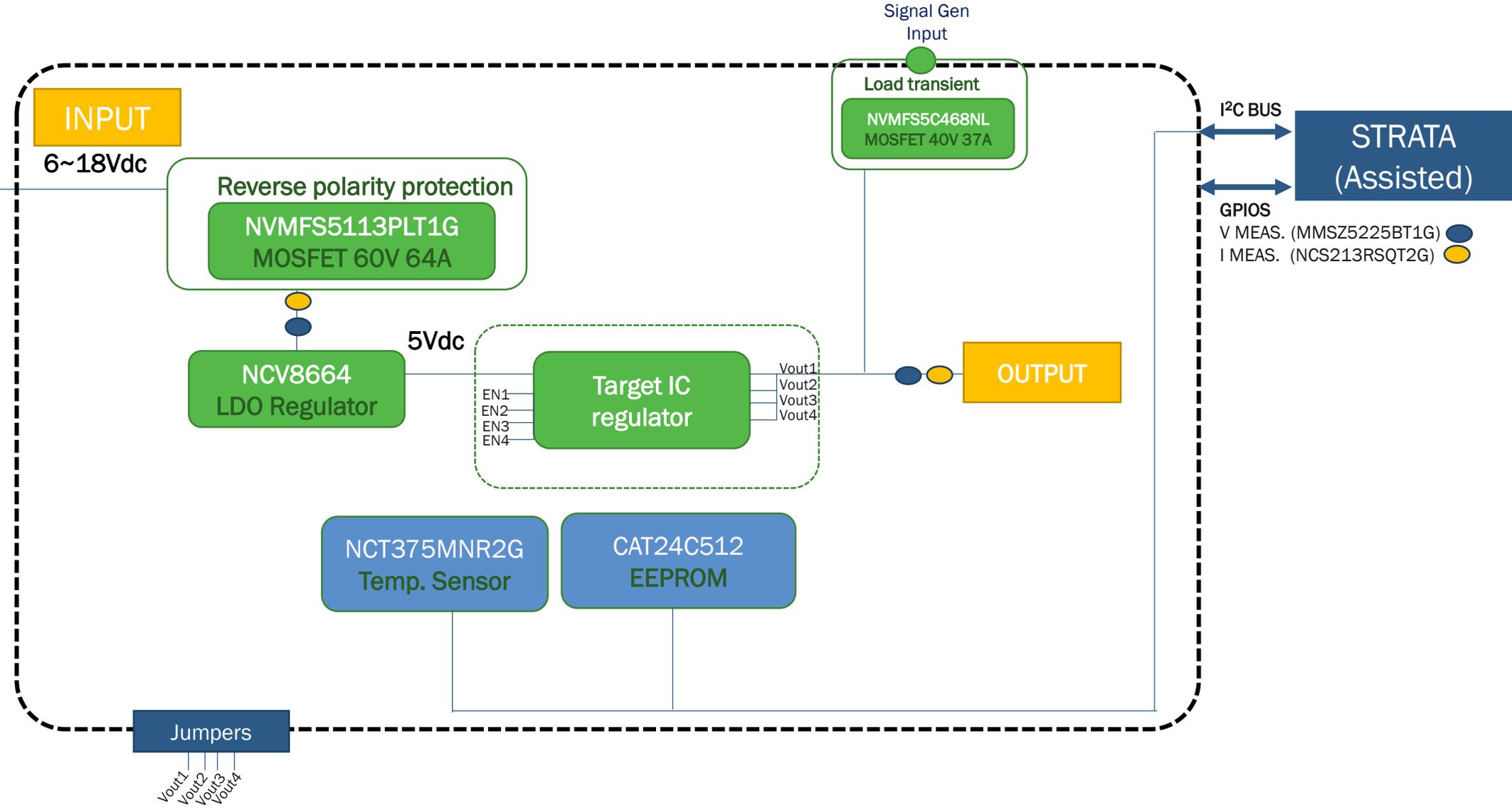
- **Automotive 12 V battery DC-DC conversion**
  - Primary voltage regulation (off 12 V battery)
  - Secondary low voltage regulation (postregulation)
- **Monitoring and setting of system variables via Strata GUI:**
  - Input and output voltages
  - Input and output currents
  - Power dissipation
  - Switching frequency
  - PWM adjustment
- **Load transient** generation from GUI
- Fast evaluation with Strata Developer Studio
- **Hardware**
  - Spacious layout with multiple test points for measurement
  - Operating temperature -40oC or +125oC
- **Multiple available ICs:**
  - NCV81599, NCV6356, NCV8177, NCV91300, NCV48920,...

## Benefits

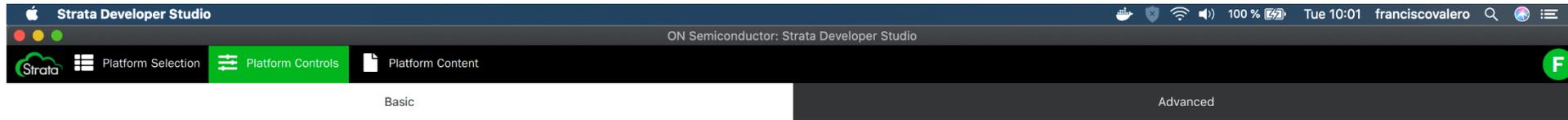
- Easy and fast evaluation and characterization of DC-DC ICs
- Speeds up development cycles
- All collateral available at Strata Developer Studio
- AEC-Q qualified parts



# Block diagram



# Strata Developer Studio – Basic panel



## NCV81599

I2C Configurable, 4-Switch Buck Boost Controller

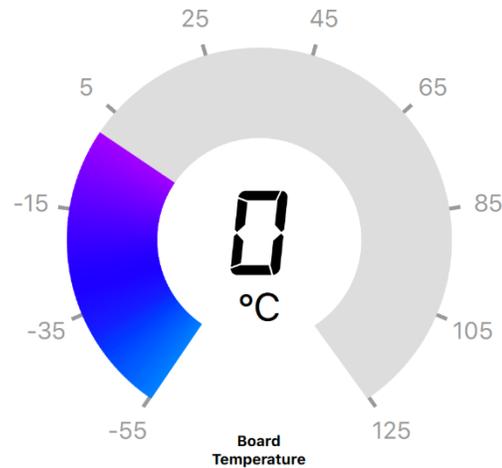
### Input

VIN Ready < 30V

**! DO NOT exceed input voltage more than 70V !**

Input Voltage  V

Input Current  A



### Output

EN/IO2

IO1/INT

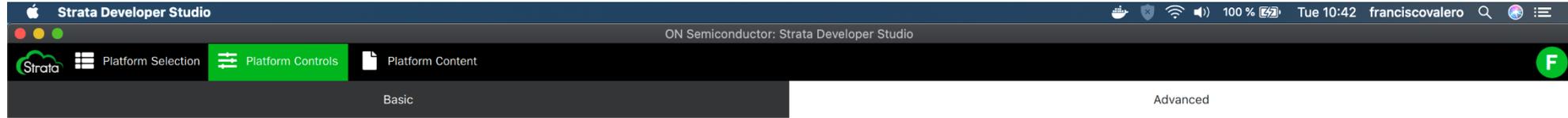
VSEL/DISCH

PG/FLT

Output Voltage  V

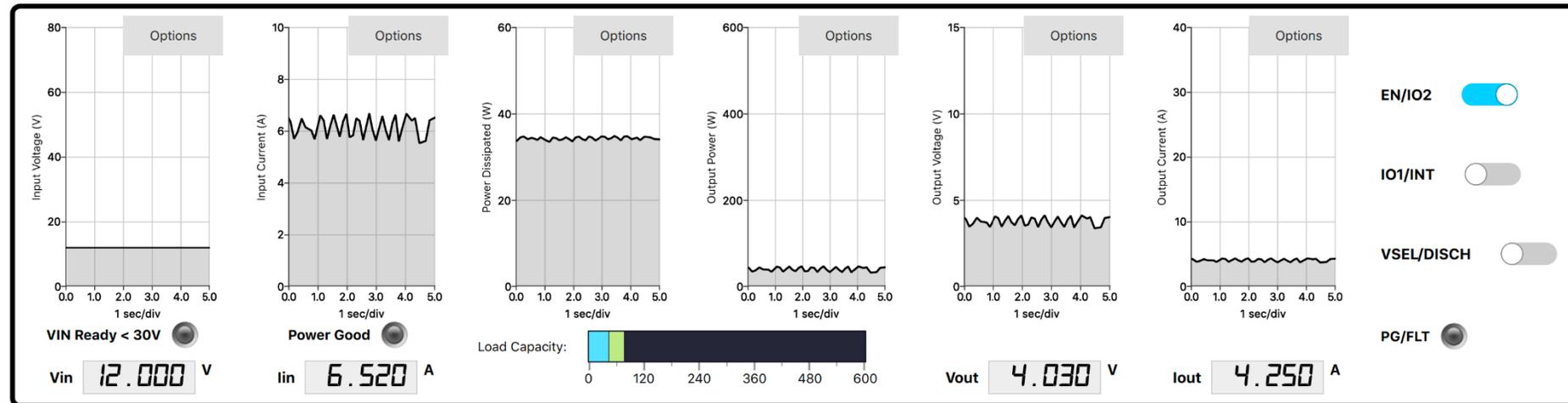
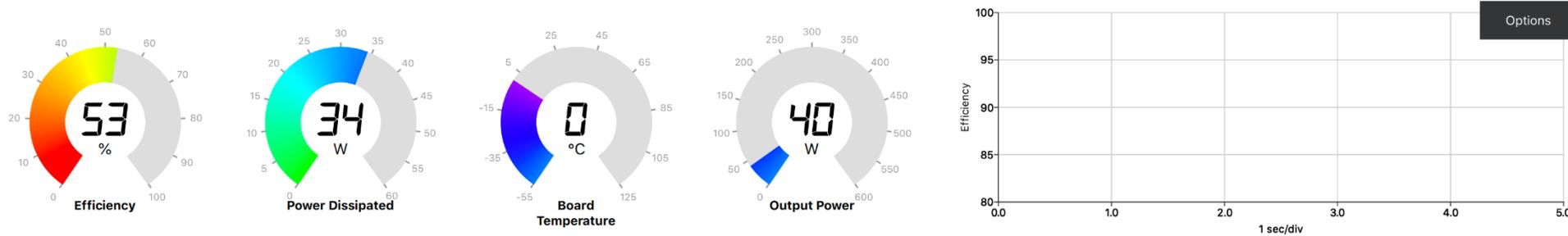
Output Current  A

# Strata Developer Studio – Advanced Panel

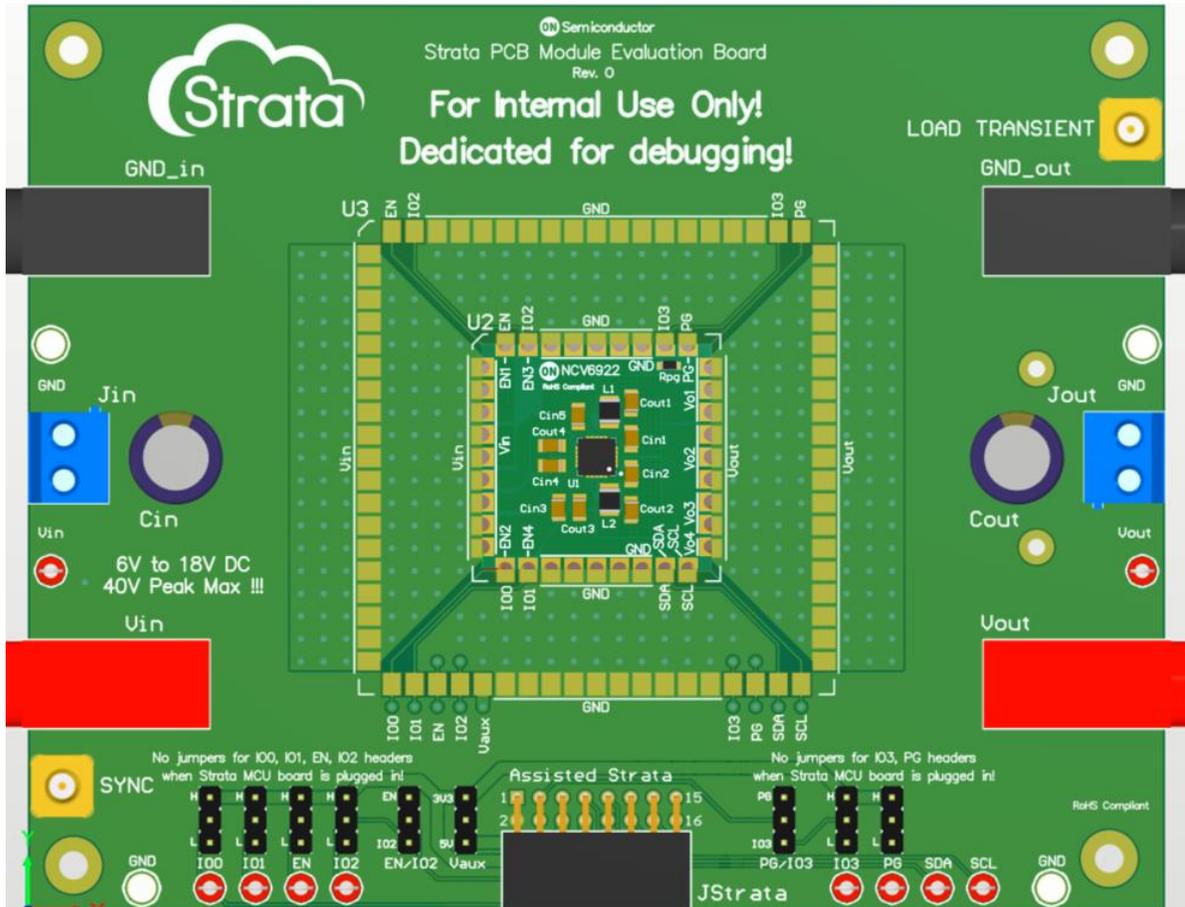


## NCV81599

I2C Configurable, 4-Switch Buck Boost Controller



# Many compatible ICs and more coming – Ask for yours!



- NCV81599 Automotive Buck Boost Controller.
- NCV6356 Automotive AOT Buck Converter.
- NCV6357 Automotive AOT Buck Converter.
- NCV91300 Automotive PWM Buck Converter.
- NCV890430 Automotive Buck Regulator.
- NCV48920 Automotive Charge Pump Buck Boost Converter.
- NCV6923F Automotive Buck Converter.
- NCV816x Linear Regulator.
- NCV6323 Buck Converter.
- NCV8177 Linear Regulator.
- NCV59745 Automotive Linear Regulator.
- NCV891930 Automotive Buck Controller.
- NCV59745 Automotive Linear Regulator

- ...

Request yours

