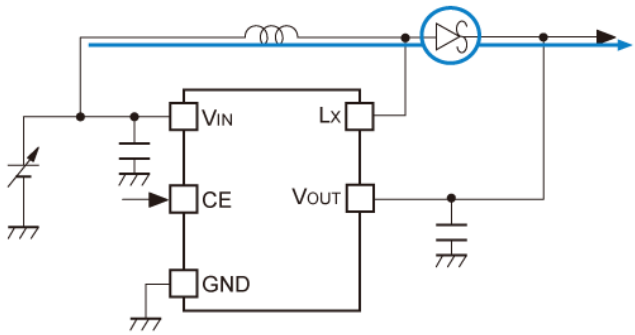
What is a shutdown function for the step-up DC/DC converter?

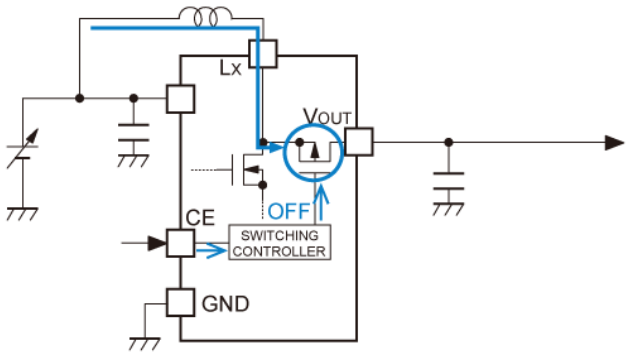
DC/DC Switching Regulators Function

Generally, the input and output of the step-up DC/DC converter using diode rectifier are connected through an inductor and a diode, as shown in the RP401. Therefore, the device outputs the voltage almost equal to the power supply voltage even during standby mode. To reduce the output voltage to zero, it is necessary to add FETs to shut down the input voltage.

However, Nisshinbo Micro Device' step-up DC/DC converter, as shown in the RP402, uses a built-in FET instead of using a diode to enable shutdown function.



RP401



RP402

The R1200/ R1202 use built-in NPN transistors instead of using diodes to enable shutdown function.

The R1213 uses an external Pch MOSFET controlled by the FLAG pin to enable shutdown function.