

ON Semiconductor®



ON Semiconductor Limerick Intern Program 2019

Company Profile

ON Semiconductor (Nasdaq: ON) is driving energy efficient innovations, empowering customers to reduce global energy use. The company is a leading supplier of semiconductor-based solutions, offering a comprehensive portfolio of energy efficient power management, analog, sensors, logic, timing, connectivity, discrete, SoC and custom devices. The company's products help engineers solve their unique design challenges in automotive, communications, computing, consumer, industrial, medical, aerospace and defense applications. ON Semiconductor operates a responsive, reliable, world-class supply chain and quality program, a robust compliance and ethics program, and a network of manufacturing facilities, sales offices and design centers in key markets throughout North America, Europe and the Asia Pacific regions.

Company Culture

As a company, we celebrate differences and promote an inclusive environment by valuing the contributions of all employees. Our knowledge of diversity goes beyond race, ethnicity and gender. We promote an inclusive environment and support the diversity of thinking that results from the differences in experiences, knowledge, culture, customs and background of all employees. Diversity of thinking helps us continue to encourage the creativity and innovation necessary for ON Semiconductor to maintain a competitive advantage in the global marketplace.

Limerick Design Center

The Limerick is the center of excellence for the development of multi-phase switching regulators. It currently employs 70 engineers and supports the development of semiconductor power controllers for both computer and mobile applications.

An intern placement with ON Semiconductor provides a student with:

- Mentoring from a senior engineer.
- Practical engineering work within a new product development team.
- Chance to develop technical skills and capabilities.
- Experience working in a leading semiconductor multinational.











ON Semiconductor®



Position: Internship for Master's Student in Engineering

Role:

Digital power management in small geometry CMOS requires the use of multiple high quality ADCs which need to be very energy efficient and capable of working to full specification in a noisy environment.

The ADC specifications are:

- 10-bits INL/DNL in 0.5V voltage range
- < 0.5mA total bias current including all support circuits
- Maximum 30ns conversion time
- Practically 0 current when not active
- Instant start/stop operation for DCM-mode operation
- Fully differential implementation







