# University Infos

<table>
<thead>
<tr>
<th>Information</th>
<th>Details</th>
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<tbody>
<tr>
<td>Laurea degree</td>
<td>LAUREA MAGISTRALE IN ELECTRONIC ENGINEERING</td>
</tr>
<tr>
<td>University tutor / Thesis supervisor</td>
<td>Prof. Edoardo Bonizzoni</td>
</tr>
<tr>
<td>Courses / Expertize of the university tutor</td>
<td>Analog Integrated Circuits / DC-DC converters, analog-to-digital converters, high performance analog circuits</td>
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## Company Infos

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<tr>
<td>Company name</td>
<td>Infineon Technologies Italia S.r.l.</td>
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<tr>
<td>Company Tutor(s)</td>
<td>Ing. Davide Respigo</td>
</tr>
<tr>
<td>Role in the company of the tutor(s)</td>
<td>Manager IC Development and Testing</td>
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## Contents and Infos on Project and Internship

### Project title: Power Management IC design

Activity scenario and targets of the internship - Area/Department/office/lab where the trainee will be involved:

**Integrated power management circuits for battery operated devices**

The candidate will join the Analog Mixed Signal Design team of Pavia development center and he/she will work side by side with senior colleagues on the feasibility study and design of a system including a DC-DC buck converter and a start-up circuit for high voltage applications.

The target of this activity is to expose the candidate to the full IC development flow, experiencing, in particular, the following tasks:

1. Circuit definition and feasibility
2. Circuit design and simulation
3. Circuit floor planning and layout
4. Post silicon verification

Background / Expertize of the student required for the internship:

- Microelectronics
- Cadence basic knowledge (optional)

Potential thesis topics:

- High voltage startup circuit for DC-DC buck converter operation
- DC-DC buck converter circuit

Company location and place of work:

Infineon Technologies Italia S.r.l. Piazza Marelli 17, 27100 Pavia

Time length of the internship: **12 MONTHS**

Benefits provided by the company (at least reimbursement of 500€ per month):

Reimbursement of 800€ per month + 8€ Ticket Restaurant for each working day

Specific company requests:

- Availability to travel in Europe

Other comments: None