

## ASTRI Summer Intern - 2011

Department / Group	Technology area(s) will be working on / Requirements /knowledge (*)	Major	Headcount
Communications Technologies Group	<b>Wireless System Implementation</b> <ul style="list-style-type: none"> <li>• Software development on Embedded Linux/ Linux driver implementation</li> <li>• TCP/IP network socket &amp; multi-thread programming</li> <li>• Objective-C &amp; iphone programming</li> <li>• Software development skill for embedded system, assembly language, C/C++, Java, etc</li> </ul>	Computer Science, Electrical Engineering, Electronic Engineering or related discipline	One
	<b>ASIC Design</b> <ul style="list-style-type: none"> <li>• ASIC Design Flow</li> <li>• RTL coding, synthesis &amp; verification</li> </ul>	Electrical Engineering, Electronic Engineering or related discipline	One
Enterprise Consumer Electronics Group	<b>P2P IPTV Quality of Experience (QoE)</b> <ul style="list-style-type: none"> <li>• Design, implement, test and document application software for P2P, DRM, QoE products</li> <li>• Simulate P2P, DRM and perform analysis</li> <li>• Cryptography &amp; DRM or multimedia codec &amp; GUI development</li> </ul>	Computer Science, Electronic Engineering or related discipline	Two
	<b>Digital Access Management (DAM)</b> <ul style="list-style-type: none"> <li>• Design, implement, test and document application software for Digital Asset Management related applications</li> <li>• DUI development</li> </ul>	Computer Science, Electronic Engineering or related discipline	Three
IC Design Group	<b>LC Display Enhancement Controller (LEDC)</b> <ul style="list-style-type: none"> <li>• Video Image Signal Processing Frame Rate Up-conversion (FRC) Algorithm Optimization</li> </ul>	Electrical Engineering, Electronic Engineering or related discipline	One

	<ul style="list-style-type: none"> <li>• Image processing Algorithm Optimization for Real Time ASIC implementation</li> <li>• New Algorithm development for 3D imaging applications</li> <li>• Hardware Module Design Implementation &amp; Verification</li> <li>• Matlab, C/C++ or Perl script programming</li> </ul>		
	<b>USB 3.0 Application Processor (U3AP)</b> <ul style="list-style-type: none"> <li>• Hardware IP design, verification, firmware development</li> <li>• C/C++ or Perl script programming</li> <li>• Logic Design</li> </ul>	Computer Science, Electronic Engineering or related discipline	One
Material Packaging Technologies Group	<b>Lithium ion battery materials</b> <ul style="list-style-type: none"> <li>• Lab-based battery materials /sample processing, coin-cell assembly, battery test and data processing</li> <li>• Surface chemical reaction and experience of carrying</li> <li>• Instrumental analysis technique based on physical chemistry and analytical chemistry</li> </ul>	Chemistry / material science / chemical engineering / electrochemistry	One
	<b>Fuel Cell Technology</b> <ul style="list-style-type: none"> <li>• Lab-based fuel cell stack and system assembly, testing and data processing</li> <li>• Knowledge of water electrical to work in fuel flow system set-up</li> <li>• Experience in carrying out electrochemical experiment</li> </ul>	Chemistry / material science / chemical engineering / electrochemistry	One
	<b>System-in-Package (SiP) Electrical performance measurements</b> <ul style="list-style-type: none"> <li>• Electrical testing for either TPM Samples or ADC-SiP samples</li> </ul>	Electrical Engineering or related discipline	One

<ul style="list-style-type: none"> <li>• Complete antenna characterization report for TPMS module</li> <li>• Knowledge on Electrical measurement equipments, e.g. signal generator, spectrum analyser, digital scope and network analyser</li> </ul>		
<p><b>System &amp; Software development and function verification of wireless body sensor network</b></p> <ul style="list-style-type: none"> <li>• System &amp; software development</li> <li>• Implementation and verification</li> <li>• Knowledge in C, assembly, visual studio, wireless communications standards, embedded system development</li> </ul>	<p>Electronics engineering or computer engineering</p>	<p>One</p>
<p><b>FF bearings integrated hands-on wind turbine</b></p> <ul style="list-style-type: none"> <li>• Design FF bearings</li> <li>• Integration of FF bearings into existing wind turbine design from Achievers Track</li> <li>• Comparison of their performance</li> </ul>	<p>Mechanical or electrical engineering</p>	<p>One</p>