

**SKILLS FRAMEWORK FOR ELECTRONICS  
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

<b>TSC Category</b>	Quality Management					
<b>TSC</b>	Quality Control and Assurance					
<b>TSC Description</b>	Implement checks and testing processes for the measurement and assurance of product quality and services to meet consumer expectations					
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
	<b>ELE-QUA-1005-1.1</b>	<b>ELE-QUA-2005-1.1</b>	<b>ELE-QUA-3005-1.1</b>	<b>ELE-QUA-4005-1.1</b>	<b>ELE-QUA-5005-1.1</b>	
<b>TSC Proficiency Description</b>	Carry out In-Process Quality Control (IPQC) checks and take corrective actions in accordance to Out-of-Control Action Plan (OCAP) procedures	Interpret Quality Control (QC) operations requirement and perform in and out quality control processes	Implement test operations for start of lot, during lot run, end of lot and out of control processes for non-conforming materials	Manage production quality assurance functions to ensure products and services meet specifications	Formulate testing strategies to ensure products exhibit the desired lifetime, functionality and performance in accordance to customer's specifications	
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>Steps involved in Final Test, Start Lot, IPQC checks and End Lot operations</li> <li>Basic Integrated Circuit (IC) packages and hardware equipment used in Final Test</li> <li>Proper material handling procedures</li> <li>Basic Final Test defects criteria</li> <li>IPQC checks</li> <li>Escalation process and OCAP procedures</li> </ul>	<ul style="list-style-type: none"> <li>Processes involved in perform QC checks operations</li> <li>Different types of packages and parts configuration run in QC process</li> <li>Equipment involved in QC processes</li> <li>Basic defects and inspection requirements</li> <li>Escalation process and OCAP procedures</li> </ul>	<ul style="list-style-type: none"> <li>Processes involved in Start Lot, in-process checks and End Lot operations</li> <li>Basic functions of Automated Tester Equipment (ATE) and handler</li> <li>Types of configuration runs at test process</li> <li>Equipment involved in test process</li> <li>Process of escalation and various Out-of-Control Plan (OCAP)</li> <li>Quality control process</li> <li>Escalation process and OCAP procedures</li> </ul>	<ul style="list-style-type: none"> <li>Types of quality assurance checks</li> <li>Qualification procedures</li> </ul>	<ul style="list-style-type: none"> <li>Types of reliability test</li> <li>Qualification procedure</li> </ul>	
<b>Abilities</b>	<ul style="list-style-type: none"> <li>Prepare to carry out Final Test processes</li> <li>Operate machine in accordance to Start and End Lot procedures</li> <li>Carry out IPQC checks</li> <li>Take corrective actions in accordance to OCAP procedures</li> </ul>	<ul style="list-style-type: none"> <li>Identify the steps involved in QC operations</li> <li>Identify hardware module of different types of inspection and/or scanning equipment</li> <li>Operate inspection machine</li> <li>Carry out In-process checks according to sampling size</li> <li>Take action for out-of-control conditions</li> </ul>	<ul style="list-style-type: none"> <li>Identify the steps involved in test operations</li> <li>Perform Start Lot according to organisational standard processes</li> <li>Perform End Lot according to organisational standard processes</li> <li>Perform in-process checks according to organisational standard processes</li> <li>Take action for out-of-control processes</li> </ul>	<ul style="list-style-type: none"> <li>Identify functions of quality assurance checks</li> <li>Determine appropriate checks to manage quality assurance</li> <li>Manage the checks and review the results</li> <li>Determine follow up action required</li> </ul>	<ul style="list-style-type: none"> <li>Identify functions of reliability tests</li> <li>Determine appropriate tests to manage reliability</li> <li>Manage the reliability tests</li> <li>Review the test results</li> <li>Determine follow up action required</li> </ul>	