

**Cyclone LC & Cyclone FX:**  
(Features subject to change)



**Cyclone LC Programmer**



**Cyclone FX Programmer**

Which of these is right for your project? See the table below for a detailed feature comparison between Cyclone and Cyclone FX.

	Cyclone	Cyclone FX
<b>Extended Security Features</b>	<ul style="list-style-type: none"> <li>Optional License for ProCryption Security</li> <li>Anti-tamper Technology</li> <li>Internal memory protection &amp; encryption</li> </ul>	<ul style="list-style-type: none"> <li><b>ProCryption Security</b> includes: <ul style="list-style-type: none"> <li>RSA/AES image encryption</li> <li>Limit date range of image programming</li> <li>Limit # of programming operations</li> </ul> </li> <li>Anti-tamper Technology</li> <li>Internal memory protection &amp; encryption</li> </ul>
<b>On-Board Storage</b>	<ul style="list-style-type: none"> <li>16MB, up to 8 programming images</li> </ul>	<ul style="list-style-type: none"> <li>1GB, 200+ programming images</li> </ul>
<b>High-Speed Target Communications</b>	<ul style="list-style-type: none"> <li>Fast</li> </ul>	<ul style="list-style-type: none"> <li>Extremely fast: Up to 75Mb/s</li> </ul>
<b>Expandable Storage - SDHC Memory Card Support</b>	<ul style="list-style-type: none"> <li>Optional License for SDHC card support.</li> </ul>	<ul style="list-style-type: none"> <li>Includes SDHC card support for storing programming images and data on external SDHC cards</li> </ul>
<b>Advanced Hardware Features</b>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Select and Launch programming via a barcode scanner</li> </ul>
<b>Multiple SAP Images</b>	<ul style="list-style-type: none"> <li>Onboard Cyclone memory</li> </ul>	<ul style="list-style-type: none"> <li>No practical limit to number of images stored in 1GB of onboard</li> </ul>

	stores up to 8 images	Cyclone memory
<b>Cyclone Control &amp; Automation</b>	<ul style="list-style-type: none"> <li>• Includes Standard Automation Features</li> <li>• <i>Advanced Automation Features Optional</i></li> </ul>	<ul style="list-style-type: none"> <li>• Includes Standard &amp; Advanced Automation Features</li> </ul>
<b>Cyclone Models</b>	<ul style="list-style-type: none"> <li>• <b>CYCLONE-LC-ARM</b> <ul style="list-style-type: none"> <li>○ Supports a variety of <b>ARM Cortex</b> MCU's</li> </ul> </li> <li>• <b>CYCLONE-LC-UNIV</b> <ul style="list-style-type: none"> <li>○ Supports a variety of <b>ARM Cortex</b> MCU's</li> <li>○ Supports <b>NXP's</b> Kinetis, LPC, i.MX, Vybrid, S32, Qorivva (MPC5xxx), MPC5xx/8xx, DSC, S12Z, RS08, S08, HC08, HC(S)12(X), and Coldfire MCUs,</li> <li>○ Supports <b>STMicroelectronics'</b> SPC5 and STM8 (with adapter)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>CYCLONE-FX-ARM</b> <ul style="list-style-type: none"> <li>○ Supports a variety of <b>ARM Cortex</b> MCU's</li> </ul> </li> <li>• <b>CYCLONE-FX-UNIV</b> <ul style="list-style-type: none"> <li>○ Supports a variety of <b>ARM Cortex</b> MCU's</li> <li>○ Supports <b>NXP's</b> Kinetis, LPC, i.MX, Vybrid, S32, Qorivva (MPC5xxx), MPC5xx/8xx, DSC, S12Z, RS08, S08, HC08, HC(S)12(X), and Coldfire MCUs,</li> <li>○ Supports <b>STMicroelectronics'</b> SPC5 and STM8 (with adapter)</li> <li>○ Supports <b>Renesas'</b> H8 and H8S/Tiny, MC16C and M16C80, M32C, R8C, RH850, RL78, RX600 (with Renesas adapter)</li> </ul> </li> </ul>