

## Graphics Libraries / Graphical User Interfaces (GUIs)

Liquid Crystal Displays (LCDs), especially those with color and touchscreen capabilities, make embedded systems much easier to use. As a result, they have become commonplace across the consumer, medical, industrial, recreational, communication, and automotive sectors. In recent years, the external LCD interface has moved onto the MCU itself, providing engineers with integrated options that reduce cost, shrink the design, increase reliability, and shorten time-to-market. Most of the software tools listed below are designed to provide graphical user interfaces (GUIs) for any application that operates with a graphical LCD. Please note that the table only includes devices with an on-chip LCD graphics controller. Many of the software tools listed here also run on NXP devices that don't have an on-chip LCD graphics controller (by using an external LCD controller).

Supplier	Graphics Libraries / GUIs	Supported Devices					Comments
		LPC247x	LH754xx	LH795xx	LH7A4xx	LPC32xx	
Green Hills	Graphics / LCD library					●	Call GHS regarding driver availability
Mentor Graphics	Nucleus LCD					●	Easily ported to other NXP controllers
	Inflexion Engine			●	●	●	3D Touch Screen & Menuing UI Engine
	UI Designer			●	●	●	Drag & Drop Toolkit with Previewer
Micrium	μC/GUI	●		●	●	●	-
Mobiclip	Mobiclip Video Codec			●	●	●	Mobiclip used to be Actimagine
Swell Software	PEG Pro			●		●	-
	PEG+	●	●	●	●	●	-
	C/PEG	●	●	●	●	●	-
NXP	SWIM (AN10815)	●				●	Free, simple graphics library from NXP
SEgger	emWIN	●	●	●	●	●	-
	Family	<sup>1)</sup>	LH7 / LH7A		<sup>2)</sup>	<sup>1)</sup> LPC2000 <sup>2)</sup> LPC3000	
	Core	<sup>3)</sup>	<sup>4)</sup>	<sup>5)</sup>	<sup>6)</sup>	<sup>3)</sup> ARM7TDMI <sup>4)</sup> ARM720T <sup>5)</sup> ARM922T <sup>6)</sup> ARM926EJ	