EAGLET ARM Baseboard



Small Form Factor Baseboard for Toradex Apalis ARM Computer-on-Modules



Create a Complete ARM-Based System

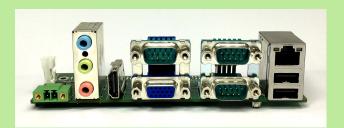
Eaglet provides a long life, scalable platform for ARM-based application development. Toradex's Apalis module family currently contains three members and all have long life commitments from their suppliers, ensuring long life availability of the complete product. Customers have great flexibility in selecting the price/performance characteristics of the installed COM along with multiple configurations including the number of cores, memory and flash size, and operating temperature.

Customizability

Most I/O features can be configured to meet any customer's specific requirements as well as cost and power consumption targets. This includes removal of unneeded features and I/O connectors plus additional ruggedization services.

Panel I/O Board

A panel I/O board is available with industry-standard I/O connectors to simplify system development. The board plugs onto the pin headers along the front edge of the Eagle baseboard, reducing cabling and making system assembly easier. See the block diagram on page 2 for a list of features available on the panel I/O board.



- ♦ Choice of Toradex ARM Computer-on-modules:
 - NVIDIA Tegra T30 1.4GHz quad core Cortex A9
 - i.MX6 NXP/Freescale 1GHz or 800MHz Cortex A9
 - NVIDIA Tegra TK1 up to 2.2GHz Cortex A15 (coming soon!)
- Standard baseboard I/O features:
 - 4 USB 2.0 ports
 - 2 RS-232/422/485 serial ports & 2 RS-232 porrts
 - 1 Gigabit Ethernet port
 - VGA, HDMI and dual channel LVDS display options
 - HD audio interface with MIC in and Line out
 - 4 12-bit A/D; 4 PWM; I2C; SPI; 8 GPIO lines
 - PCIe MiniCard and mSATA sockets
- ♦ Small form factor: 4.0" x 4.0" (102mm x 102mm)
- ♦ -40°C to +85°C (-40°F to +185°F) operating temperature

Selection of Toradex ARM COMs

CONSCIONAL TO			
Apalis iMX6	Apalis T30	Apalis TK1	
		(coming soon!)	
Freescale i.MX6	NVIDIA Tegra 3	NVIDIA Tegra K1	
ARM Cortex A9	ARM Cortex A9	ARM Cortex A15	
Quad core	Quad Core	Quad core	
Dual core			
1GHz / 800MHz	1.4GHz	Up to 2.2GHz	
512MB to 2GB	1GB or 2GB	2GB DDR3 RAM	
DDR3 RAM	DDR3 RAM		
4GB eMMC flash	4GB/8GB eMMC	16GB eMMC flash	
	flash		
End of life 2025	End of life 2028	End of life 2025	

See www.toradex.com for more information.

Linux Board Support Package

The Eaglet Linux BSP is based on the Open Embedded Build Framework. The BSP is delivered on a 32GB micro-SD module and contains all drivers necessary for controlling all peripherals on Eaglet. Just plug the SD into Eaglet and the board is ready to run.

Optional Dual CAN

An optional daughterboard can be mounted on Eaglet to provide access to the 2 CAN 2.0 ports available on the Apalis module. The ports feature opto-isolation and jumper-configurable split bias termination.



EAGLET: Baseboard For Toradex Apalis ARM COMs



Specifications		
Supported COMs	Apalis iMX6 800MHz or 1GHz ARM Cortex A9 Apalis T30 1.4GHz ARM Cortex A9	
Networking	1 Gigabit Ethernet port	
Serial ports	2 RS-232/422/485 ports with software configuration & 2 RS-232 ports	
USB ports	4 USB 2.0 ports	
Video output	i.MX6 T30 VGA 1280x1024 1920x1200	
	LVDS 1920x1200 dual ch 2048x1536 dual ch HDMI HDMI1.4a up to 1080p/60Hz	
Mass storage	1 micro SD & 1 mSATA socket	
Audio	HD audio	
Data acquisition	4 12-bit A/D, 4 PWM 8 GPIO, 3.3V logic levels	
Connectivity	1 I2C & 1 SPI	
I/O expansion	PCIe MiniCard socket (with SIM socket)	
Input voltage	+5VDC +/-5%	
Power consumption	(not including installed ARM module)	
Operating temp	-40°C to +85°C (-40°F to +185°F)	
Shock & Vibration	MIL-STD-202G compatible	
Dimensions	4.00" x 4.00" (102mm x 102mm)	
RoHS	Compliant	

Ordering Information		
EGLT-LC-BB	Eaglet Baseboard for Toradex Apalis	
DK-EGLT-MX6Q2G-LNX	Eaglet Development Kit with i.MX6 / Linux	
DK-EGLT-T3Q1G-LNX	Eaglet Development Kit with T30 / Linux	
SDK-EGL-MX6-LNX	Linux BSP for Eaglet / i.MX6 on Micro-SD	
SDK-EGL-T30-LNX	Linux BSP for Eaglet / T30 on Micro-SD	
PNL-EGL-01	Eagle/Eaglet Panel I/O Board	
CK-EGLT-01	Eaglet cable kit, no HDMI cable	
CK-EGLT-02	Eaglet cable kit, with HDMI cable	

Complete Solutions Available

Eaglet is also available as a complete SBC with Apalis module and heat sink pre-installed. The SBC is also available in an enclosure for a deployment-ready solution with table-top, bulkhead, and DIN rail mount options.



