

	Feature / Benefit
Microcontroller	
32bit ARM Cortex-M4F, 120MHz, 1MB Flash, 256KB RAM	Enables customers to develop and run software
Interfaces	
RS485/422 full duplex	Common interfaces for industrial and commercial markets
RS485 half-duplex	
RS232	
Screw terminal block	Enables wire to board access
Shrouded connector	Enables board to board access
Slide switch and dip switch	Enables selection of interfaces
Power Input	
4.5V - 30V	Enables a wide range of input voltage
External power terminal input	Enables external power sources, ex. battery, test bench, etc.
Standard barrel connector input	Enables AC/DC adapter
USB power input	(Excludes ema) Simplifies MCU firmware development
ema load switch	Enables testing of low power implementations
User I/O Header	
Access to GPIO of on-board MCU	Many built-in interfaces to enable customers to test a variety of firmware applications without the need for additional hardware
External host/MCU system access to ema and built-in features	
1 x i2c	
1 x CAN bus	
4 x UART	
1 x Analog to digital	
1 x Digital to analog	
6 x GPIO of built-in MCU	
Sensors	
Temperature	Built-in sensors simplify customer development of firmware that will be deployed into designs that utilize sensors
Humidity	

	Feature / Benefit
Light/photo	
LED array	
Push buttons	
User Power Application Header	
3.3V, 4.0V for external usage	Enables control over many power aspects for convenient development and testing
ema power disable control	
3.3V power disable control	
ema IOVREF control	
ema Reset request control	
ema on/off control	
3.3V, 4.0V for external usage	
Other	
Built-in SEGGER J-Link debugger	Simplifies customer firmware development, no need to purchase an external debugger
Test points	Easy grab points for measurements
Antenna	
AC/DC power supply	
Schematics and CAD data available	
User guide	
Part Numbers	
EMA-ZZ-1-XX-Z-B	ema:Play Evaluation Kit
EMA-L4-1-XX-A-B	ema:Play Evaluation Kit with EMA-L4-1-XX-A-A ema modem (North America)
EMA-L4-1-US-B-B	ema:Play Evaluation Kit with ema EMA-L4-1-US-B-A ema modem (US only)