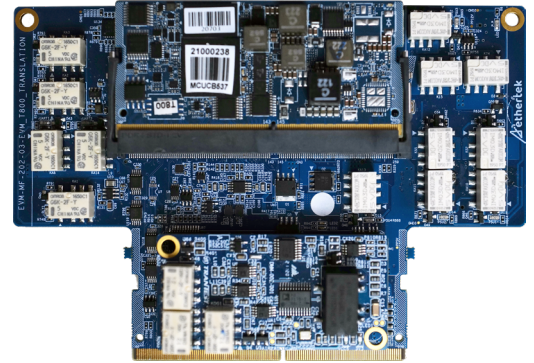
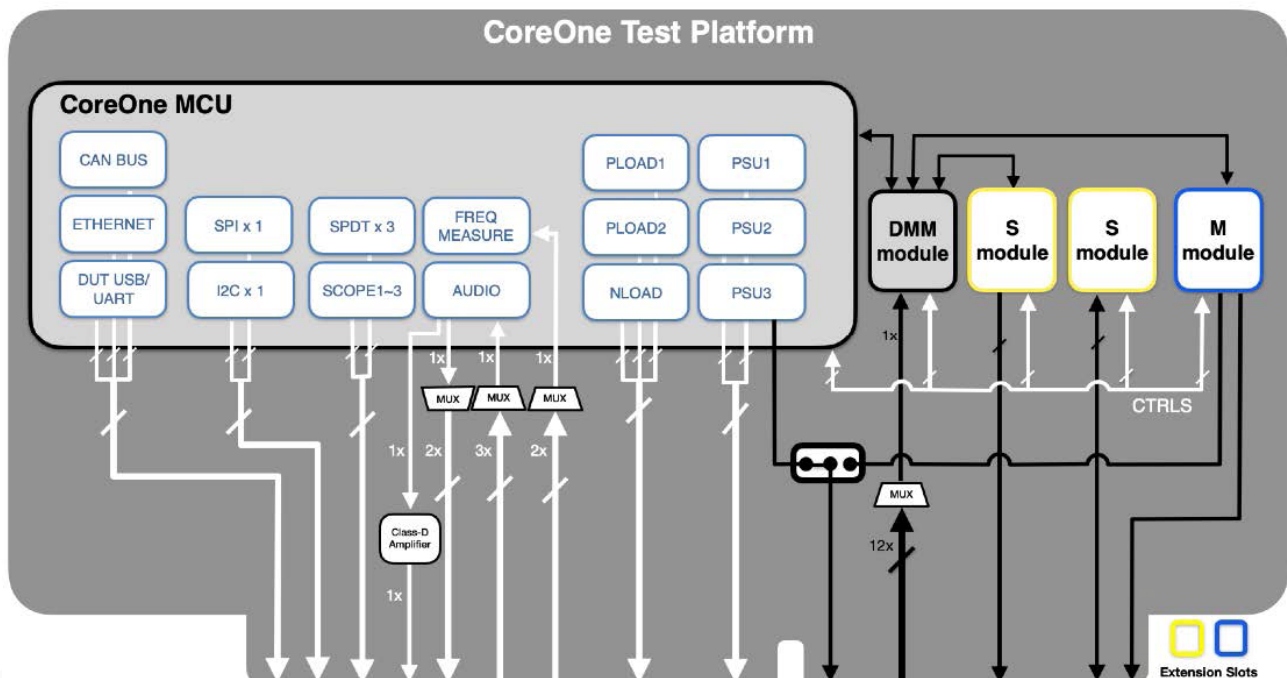


Features

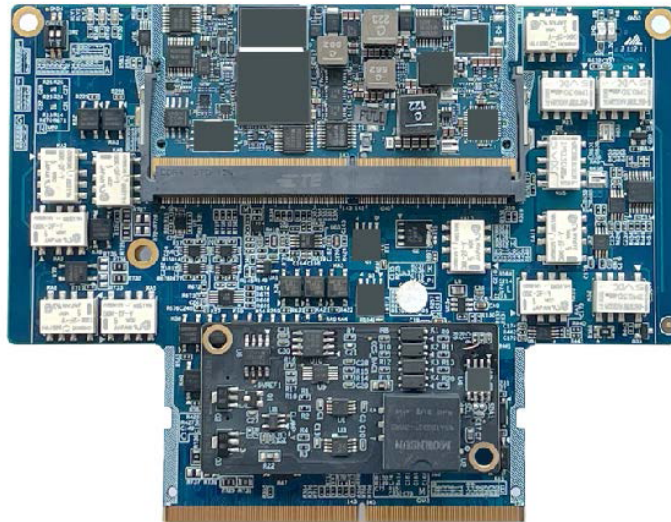
- Flexible control interface: USB & Ethernet
- Multiple interface option to DUT: (CAN, USB, I2C, SPI, etc.)
- Precision voltage and current measurement
- Audio analyzer and generator to perform audio test
- Multi-channel battery emulator for charging test
- Multi-channel E-load for discharging test



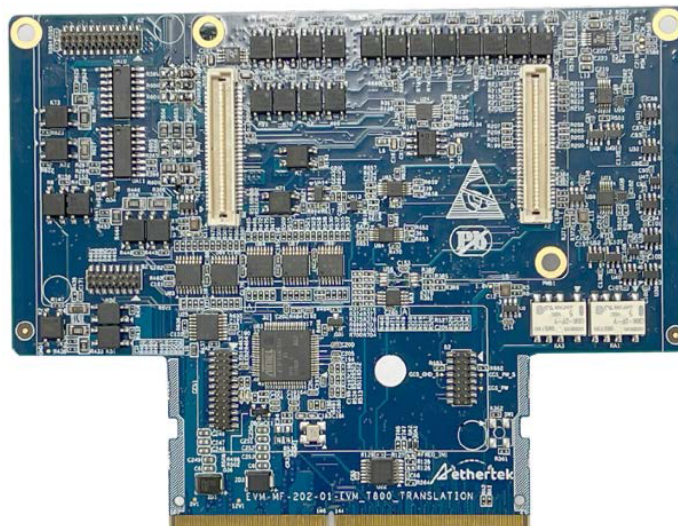
Functional Block Diagram



T800 Platform



Front View
(Standard Package)



Rear View

Electrical Specifications

DMM specifications		Specifications
Voltage DC	Voltage	$\pm 24V$
	Accuracy	$\pm (0.1\%+1mV)$
	Resolution	24bits
Channel		12
Frequency measurement		Specifications
Waveforms		Sine-wave, sine+DC offset, square-wave
Input Level Range		0 V to 1.8 V
Measurement Frequency Range (Fs)		DC to 25MHz
Measurement Accuracy		$\pm 25ppm$
Audio Generator		Specifications
Channel count		2 (Single end) or 1 (Differential) with 1 (Class-D)
General Output	Waveforms	Sine-wave
	Frequency Range	0.1 Hz to 10 kHz
	Frequency Accuracy	100Hz~500Hz: $\leq \pm 6\%$ 500Hz~1kHz: $\leq \pm 1\%$ 1kHz~10kHz: $\leq \pm 0.5\%$
	Amplitude Range	$\leq 2.0 V_{pp}$
	Amplitude Accuracy, 1 kHz	$\pm 0.5\%$
	Residual THD+N	≤ -75 dB, 20KHz BW, 1K tone, 2 Vpp
	Output Voltage Level	$\pm 3V$
Class D Output	Output Driving Current	0.375A
	Output Frequency Range	20Hz ~ 10Khz
	Driving Capability	Up to 8 ohm/1w speaker load
Audio Analyzer		Specifications
Channel count		3 (Differential)
Input Voltage	Vac	$\leq 3 V_{pp}$
Input Frequency Range		20 Hz to 10 kHz
Level (Amplitude) Measurement		$\pm 0.5\%$
THD+N Measurement		≤ -80 dB, 20KHz BW, 1K tone, 3 Vpp

Electrical Specifications

Hardware Interface		Specifications	
Interface	Ethernet	1x	PC to CoreOne
	USB HS	1x	
	UART	1x	UART1
	CAN	1x	CAN1
	I2C	1x	I2C3
	SPI	1x	SPI4
Digitizer (Scope)		Specifications	
Waveform capture	Voltage Range	0~5V	
	Trigger mode	Pre-trigger, rise/fall trigger, continuous acquisition	
	Sample rate	2MSPS* (Simultaneous)	Note 2MSPS for 2 channels 1MSPS for 3 channels
	Channel count	3	
Electronic Load (E-Load)		Specifications	
Positive E-Load 1	Current sink capability	0.5V to 20V 100mA to 6000mA	CC mode
	Readback accuracy	FI: $\pm(0.1\%+1\text{mA})$ MI: $\pm(0.1\%+1\text{mA})$ MV: $\pm(0.3\%+1\text{mV})$	
Positive E-Load 2	Current sink capability	0.5V to 20V 1mA to 1200mA	CC mode
	Readback accuracy	FI: $\pm(0.1\%+0.1\text{mA})$ MI: $\pm(0.1\%+0.1\text{mA})$ MV: $\pm(0.3\%+1\text{mV})$	
Negative E-Load	Current sink capability	-0.5V to -20V 100mA to 3000mA	CC mode
	Readback accuracy	FI: $\pm(0.1\%+1\text{mA})$ MI: $\pm(0.1\%+1\text{mA})$ MV: $\pm(0.3\%+1\text{mV})$	

Power Specifications

Power Specifications		PSU1	PSU2	PSU3
Power Type	Source/Sink	Source	Source/Sink	
DC output rating		1.5 to 20 V	1.5 to 4.7 V	1.5 to 4.7 V
		0 to 3A (<12 V)		
		0 to 2A (12V to 20V)	0 to 6A	0 to 6A
DC input rating		-	0 to 6A	0 to 6A
Programming accuracy ± (% of output + offset)				
Voltage			± (0.3%+1mV)	
Readback accuracy ± (% of output + offset)				
Voltage			± (0.3%+1mV)	
Current	< 6 A		± (0.5%+1mA)	
	3A for PSU1			
	< 80mA		± (0.5%+0.1mA)	
	< 80uA		± (0.5%+0.1uA)	
Load transient recovery time				
Time (@Max. current load)		< 250 uS	< 50 uS	< 70 uS
Output ripple and noise (20 Hz to 20 MHz)				
Normal mode voltage (@Max. current load)		< 35m Vpp	< 20m Vpp	< 35m Vpp
Protection ± (% of output + offset)				
Overcurrent protection (OCP)			± 1%	
Overvoltage protection (OVP)			± 1%	
Activation time (average time for the output to start to drop after OVP or OCP condition occurs)				
Overcurrent (OCP)			< 2 ms	
Overvoltage (OVP)			< 2 ms	
Load regulation ± (% of output + offset)				
Voltage (@Max. current load)			± (0.3%+1mV)	

Power Specifications

Parameter		Min.	Typ.	Max.	Unit
DC Supply -1	Voltage	11	12	13	V
	Current	-	16	-	A
DC Supply -2	Voltage	4.6	5	5.5	V
	Current	-	2	-	A
DC Supply -3	Voltage	-13	-12	-11	V
	Current	-	2	-	A

General Specifications

Parameter	Conditions	Min.	Typ.	Max.	Unit
Operating Temperature		0	-	40	V
Dimension	Length	-	130	-	A
	Width	-	45	-	V
	Height	-	100	-	A