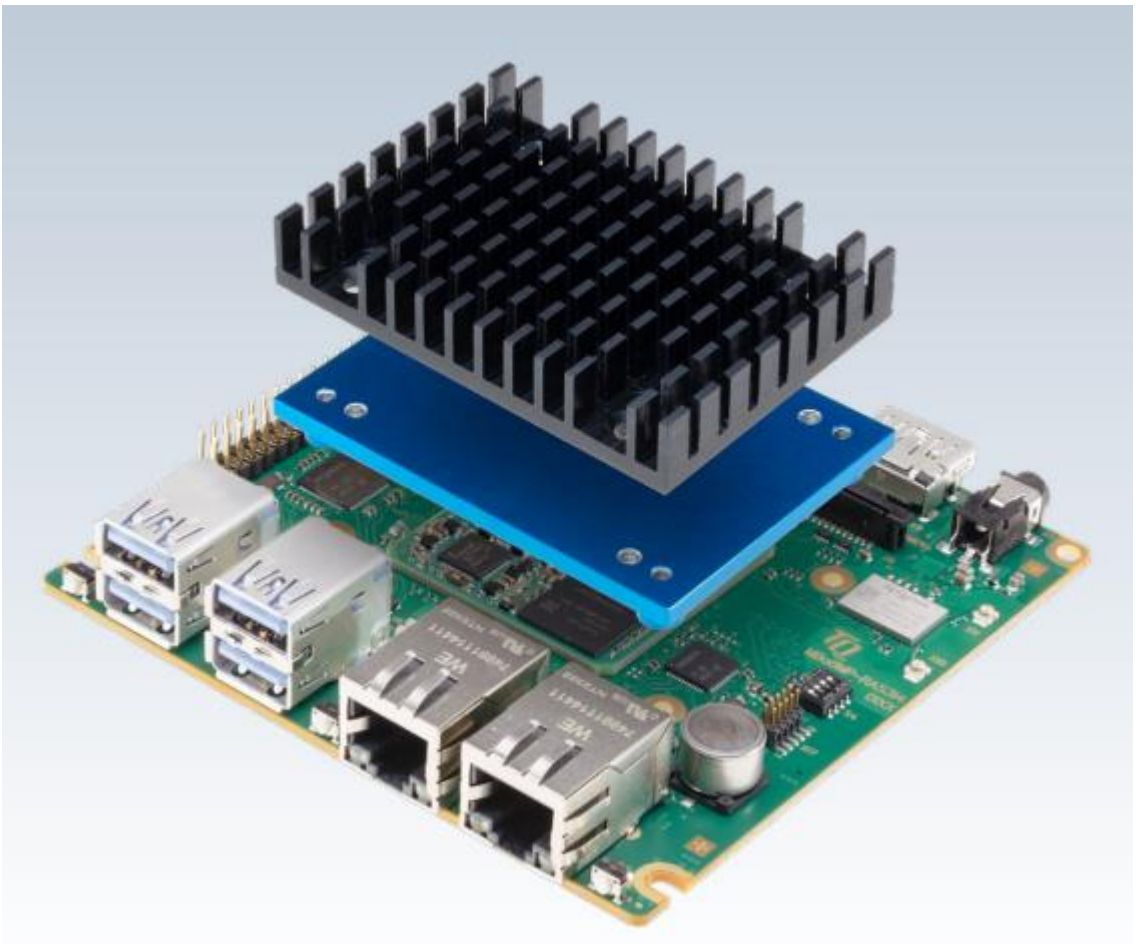
When a Raspberry PI is not enough

by Paul Roberts.

Introduction

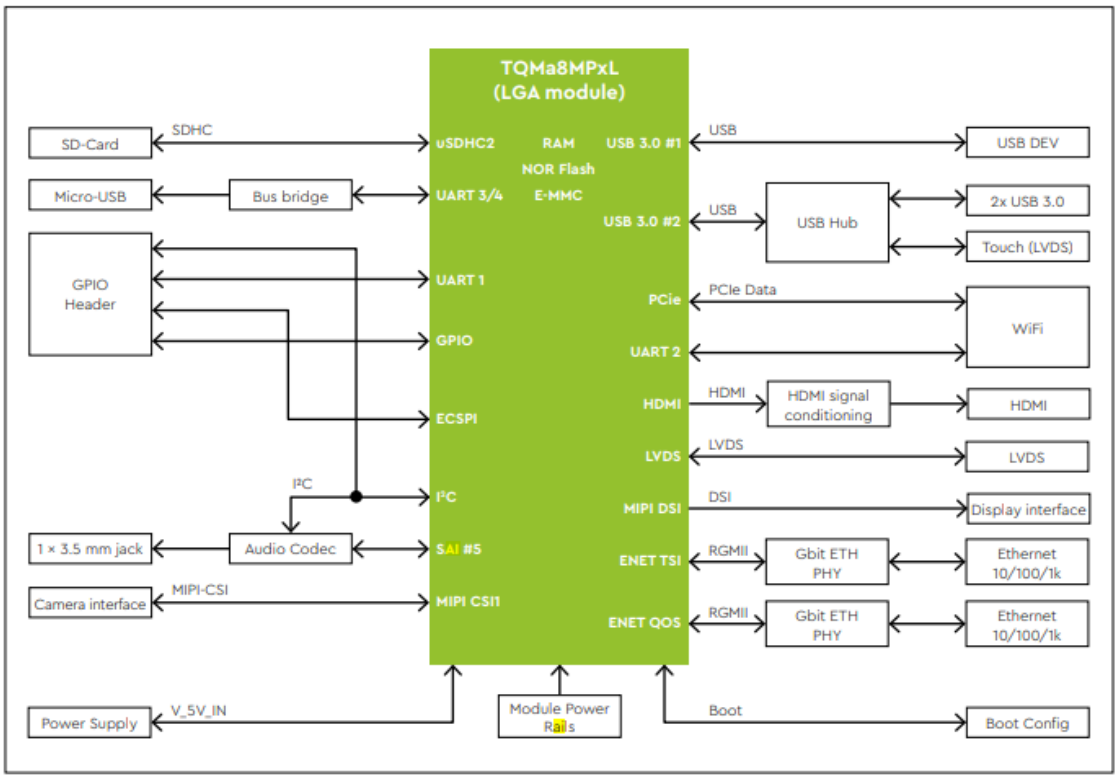
This Embedded Cortex®-A53 Module based on an NXP i.MX 8M Plus with machine learning hardware support, is a soldered down SoM on carrier board that emulates and enhances the original Raspberry PI concept.



Alternative Choices

When your Raspberry Pi starts to run out of steam or lacks the more up to date features such as the latest security enhancements or AI. Or perhaps your looking for an industrial device with low power, extended temperature range of -40°C…+70°C and long term availability of 15+ years , then where do you turn ? Well now TQ have given us the answer in the form of their new MBa8MP-RAS314 Motherboard.

BLOCK DIAGRAM MBa8MP-RAS314



This is essentially a carrier board for their small industrial module, the TQMa8MPxL, which is an Embedded Cortex®-A53 Module based on an NXP i.MX 8M Plus with machine learning hardware support and comes pre-soldered onto the carrier board. The solution emulates and enhances the original Raspberry PI concept. The standard carrier boards come with dual Ethernet which immediately opens up more possibilities than the original Raspberry PI. To emulate the operating system and software that you might be familiar with TQ have opted for Armbian rather than Yocto and you can choose from the Ubuntu or Debian build approaches. At a later stage should you wish to emulate the newer Raspberry PI compute module you can obtain the TQMa8MP separately and design your own carrier board for it or Hitex can even take your requirements and do this for you. Either way you have a sustainable product that will allow you to concentrate on future enhancements rather than re-spinning the current ones.

Further Information

Read more about the MBa8MP-RAS314 Motherboard and download the full whitepaper here.

For the TQMa8MPxLmodule visit here.

For more information visit our website: www.hitex.co.uk or get in touch: info@hitex.co.uk. You can also connect with us: @hitexuk (Facebook & X)