

# SynQuacer™ E-Series

## ARM® v8 Multi-core Development Kit



The MicroATX Board with  
SynQuacer™ SC2A11



SynQuacer™ 96 BoardsBox

### ■ CPU Overview



<b>Processor</b>	Cortex-A53 MPCore 24Core, 1GHz, L1 I/D=32KB/32KB L2=256KB, L3 =4MB
<b>Memory I/F</b>	DDR4- 2133Mbps 64-bit + ECC
<b>PCIe</b>	PCI Express Gen 2, Root/Endpoint 4 lanes (2 systems/for SoC IF)
<b>LAN</b>	1ch 1Gbps with IPSec Network Offload Engine (wire-speed)
<b>Storage I/F</b>	HSSPI, eMMC
<b>Serial I/F</b>	UART, I²C, GPIO

### ■ For Developers

- Native ARM v8, 64-bit development environment
- Easy to use, easy to build your own tool

### ■ Overview

- 96Boards Enterprise Edition
- SoC: Socionext SC2A11 (SynQuacer™)
- 4 x DDR4-2133
- PCIe: 2 x 1 lane, 1 x 16 lane (4 lane signal connection)
- 1 x GbE
- 4 x USB3.0/2.0
- 2 x SATA
- 40-pin LS Expansion Connector
- RTC

Chip1stop



Japanese



English

## ■ Collaboration with AI Accelerator

# AI Inference Node for Edge

The most energy efficient standalone AI Inference Node

### Features

Standalone AI Inference Solution for the Edge

- High throughput (22.4[TOPS]/module)
- Powerful CNN performance (200fps/system)
- Low power consumption: Consumes 3W for AI operation

### Sample Configuration:

During AI operation: 35W/BOX

During idle (non AI operation): 32W/BOX

### Components

- **Processor:**

SynQuacer Socionext SC2A11 96Boards  
(24 Cores of Cortex-A53)

- **AI Accelerator:**

4 chips of Gyr Falcon Lightspeed® on an M.2 module

