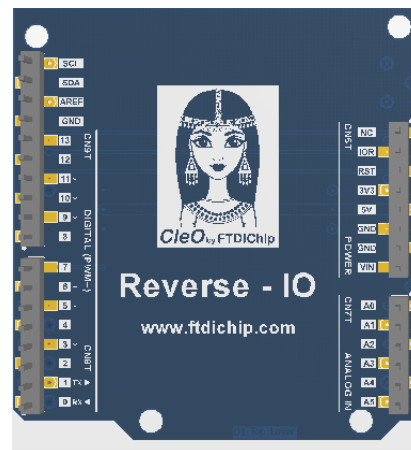


**Future Technology
Devices International
Limited
Datasheet
CleO-RIO Module**



1 Introduction

The CleO-RIO module is an Arduino shield adapter board giving users the flexibility to stack their Arduino board on top of the CleO35 module- the smart TFT Display.

The module is a two layer PCB with dimensions of 57.15mm X 54.35mm

2 Ordering Information

Part No.	Description
CleO-RIO1	CleO-Reverse I/O adapter board

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3 Pin Out and Signal Description

3.1 Module Description

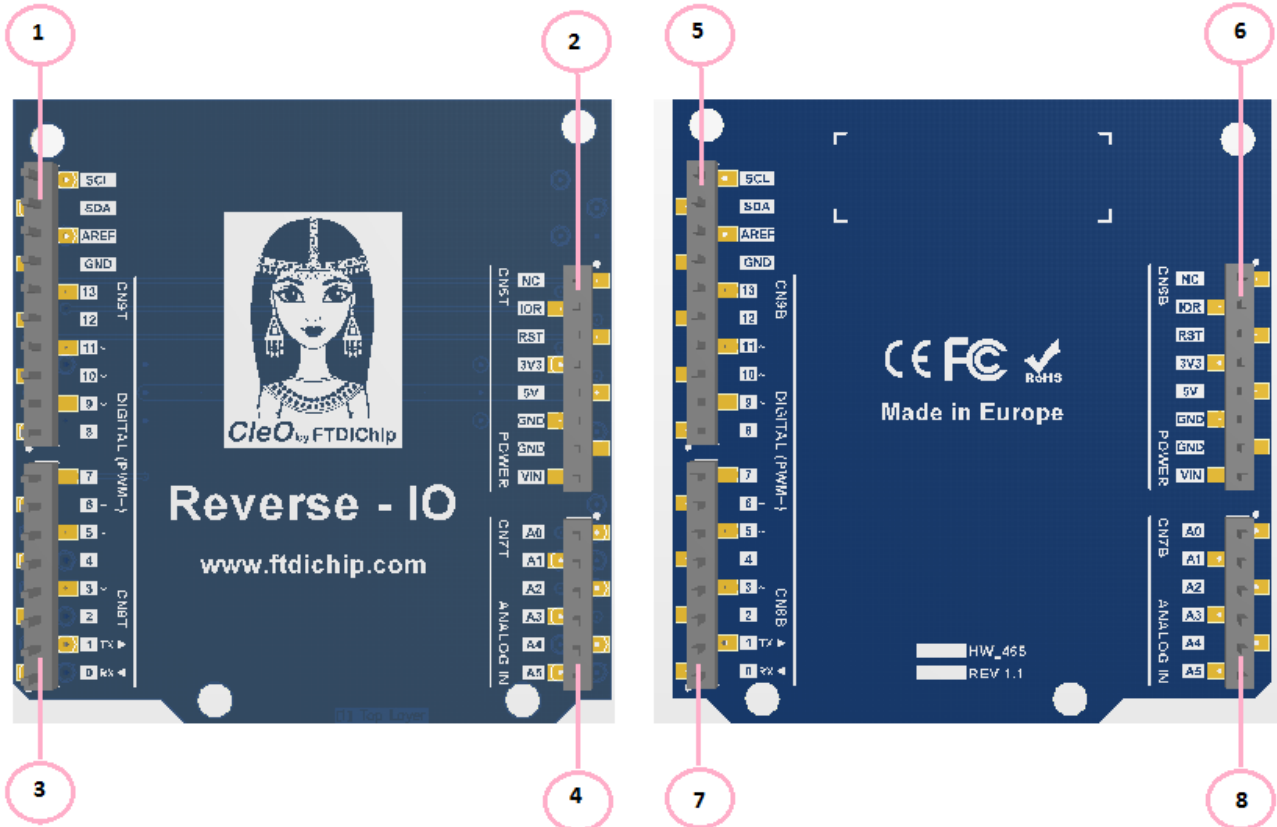


Figure 1 - CleO RIO Module Features

No	Feature	Reference Designator
1	1x10 position 2.54mm pitch SMT header	CN9T
2	1x8 position 2.54mm pitch SMT header	CN6T
3	1x8 position 2.54mm pitch SMT header	CN8T
4	1x6 position 2.54mm pitch SMT header	CN7T
5	1x10 position 2.54mm pitch SMT header	CN9B
6	1x8 position 2.54mm pitch SMT header	CN6B
7	1x8 position 2.54mm pitch SMT header	CN8B
8	1x6 position 2.54mm pitch SMT header	CN7B

Table 1 - CleO RIO Module Features Description

3.2 Module Signal Description

The pin description of **CN9T** and **CN9B** is the same and is given in Table 2.

Pin No	Pin Name	Description
1	-	NC
2	-	NC
3	D10	SPI Chip select option3
4	MOSI	SPI data from master side
5	MISO	SPI data to master side
6	SCK	SPI clock
7	GND	Ground
8	-	NC
9	-	NC
10	-	NC

Table 2 - CN9T and CN9B Pin Description

The pin description of **CN8T** and **CN8B** is the same and is given in Table 3.

Pin No	Pin Name	Description
1	-	NC
2	-	NC
3	D2	FT903 Interrupt request out option 1
4	D3	FT903 Interrupt request out option 2
5	-	NC
6	D5	SPI Chip select option1
7	-	NC
8	D7	SPI Chip select option2

Table 3 - CN8T and CN8B Pin Description

The pin description of **CN6T** and **CN6B** is the same and is given in Table 4.

Pin No	Pin Name	Description
1	-	NC
2	IOREF	IO reference voltage supply input
3	RESET	FT903 reset signal
4	-	NC
5	VDD_5V	5V Supply
6	GND	Ground
7	GND	Ground
8	-	NC

Table 4 - CN6T and CN6B Pin Description

4 Board Schematic

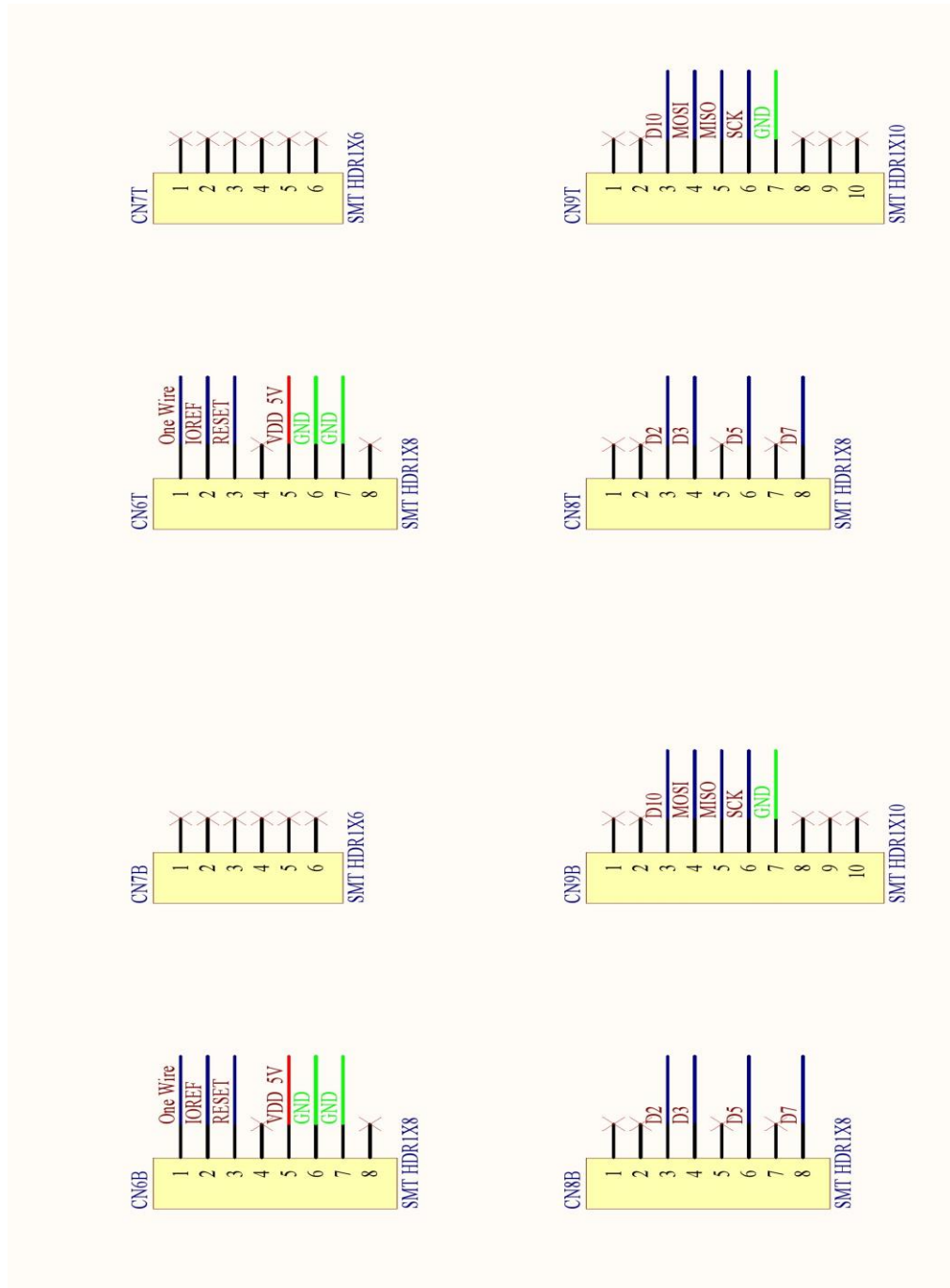


Figure 2 - Reverse I/O Schematic

5 Mechanical Dimensions

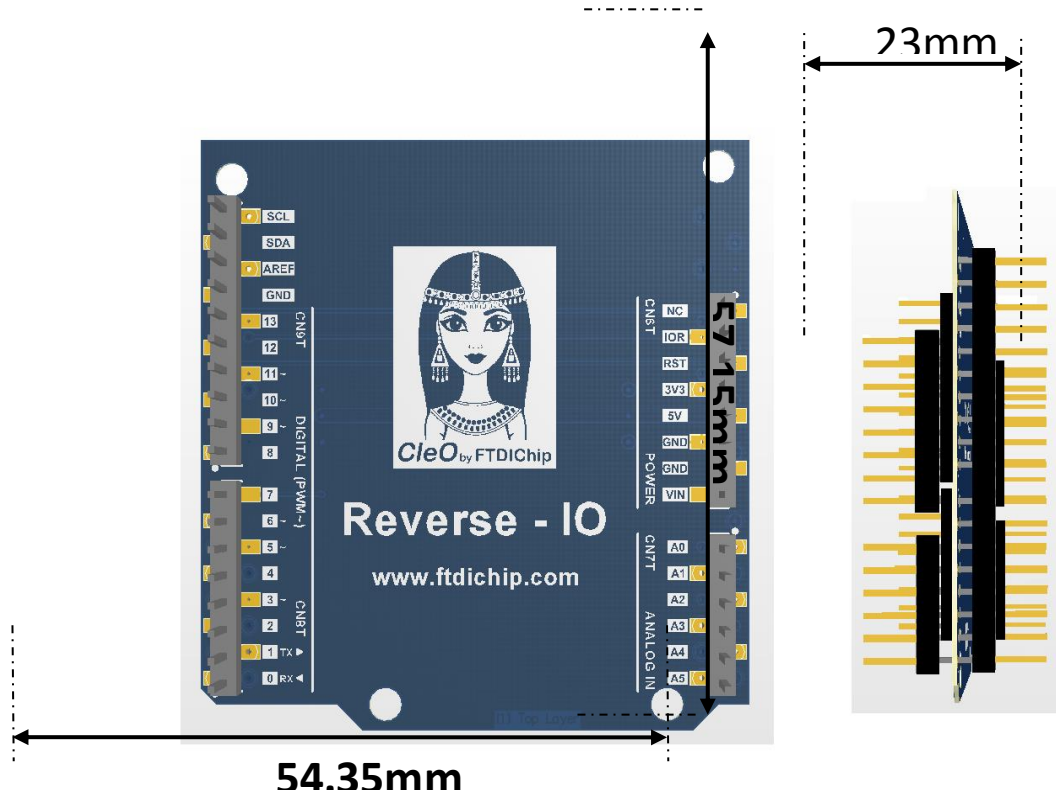


Figure 3 - CleO RIO Module Dimensions

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Appendix A – References

Acronyms and Abbreviations

Terms	Description
TFT	Thin Film Transistor
SPI	Serial Peripheral Interface
SMT	Surface Mount Technology

Appendix B - List of Figures and Tables

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Appendix C – Revision History

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Revision	Changes	Date
Version 1.0	Initial Release	2016-04-20