



Dragonchip

ADC Demo

AppNote304

Document Revision 1.1

July, 2020

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1 Introduction

This document describes how to access ADC and is applicable to the following devices:

- 1) DC6288FT

The application will do the following tasks:

- 1) Timer 0 configure as timer (it stops when stop mode)
- 2) PA0~3 as key pad function to detect any key pressed and wake up from stop mode
- 3) PA4 / PA5 configured as ADC input single-ended sources.
 - 甲、ADC is configured as single shot mode triggered by software. The result are output to UART@9600bps (1-start, 8-bit data, 1-stop bit)
 - 乙、VDD as Vref, 2047 steps with full VDD range, and below 0.7v ADC reads 0

The application can configure CPU clock to 3MHz / 6MHz / 12MHz.

Source code is written in c, and located in folder 'SourceCode'.

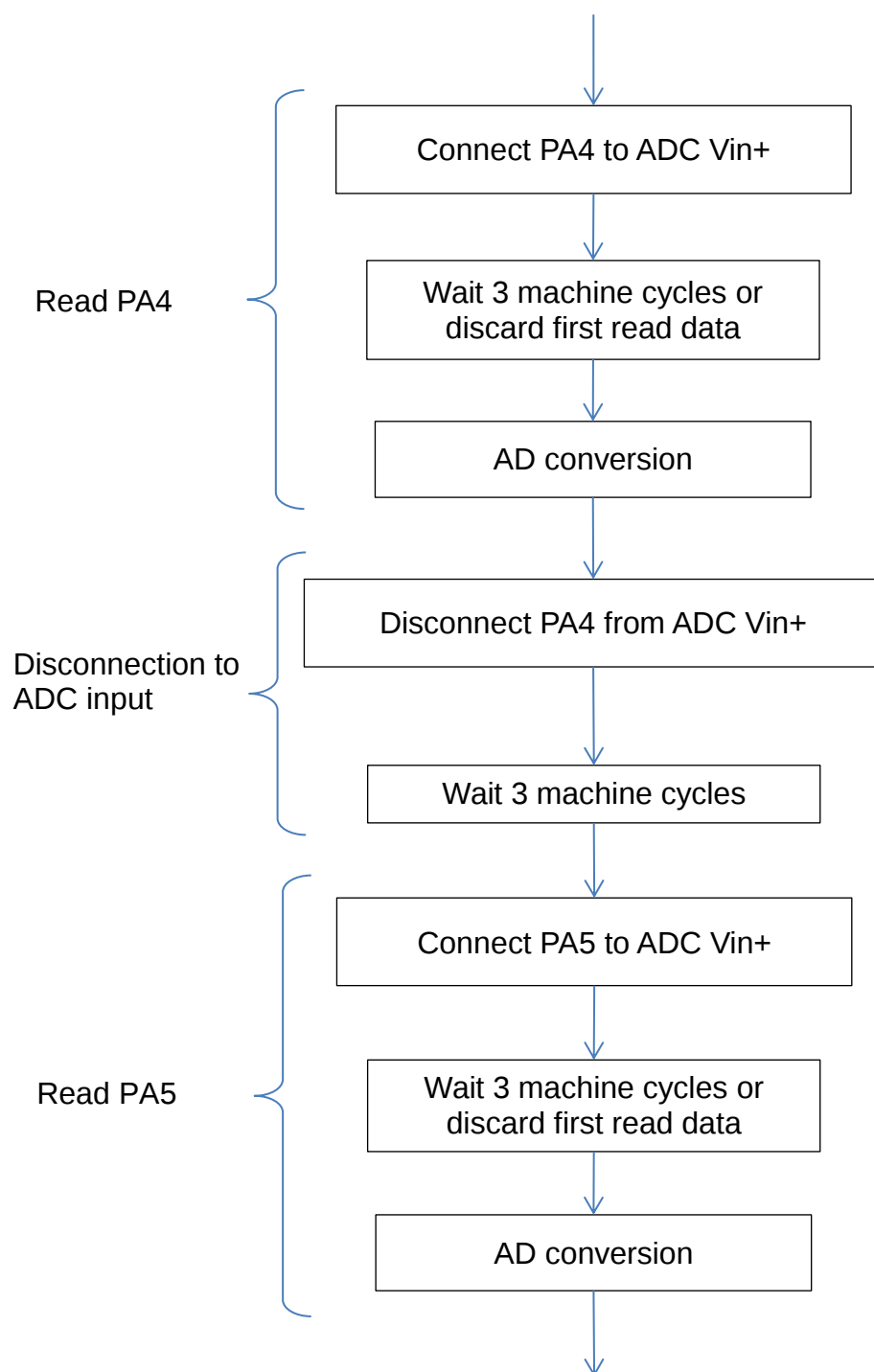
Keil project: Demo-IC.uvproj

Schematic is located in folder 'Schematic'.

While switching between I/O ports to the input of ADC, care must be taken on the following instant:

- 1) Disconnect last port to ADC before connection to next port
- 2) Port connection settling time before start conversion

E.g. the application will read PA4 and then PA5. The software flow chart will be like this.



User can make use of function ‘_nop_()’ which take one machine cycle for delay purpose.

Revision History

Document Rev. No.	Issued Date	Section	Page	Description	Edited By	Reviewed By
1.0	May, 2018			Preliminary for demo program	Danny Ho	Patrick Li
1.1	July, 2020	1		Revise description	Danny Ho	Patrick Li

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Dragonchip Ltd.
TEL: (852) 2776-0111
FAX: (852) 2776-0996
<http://www.dragonchip.com>