Dragonchip

DC6688FLT-EVK-WLP16 User Manual

AppNote136

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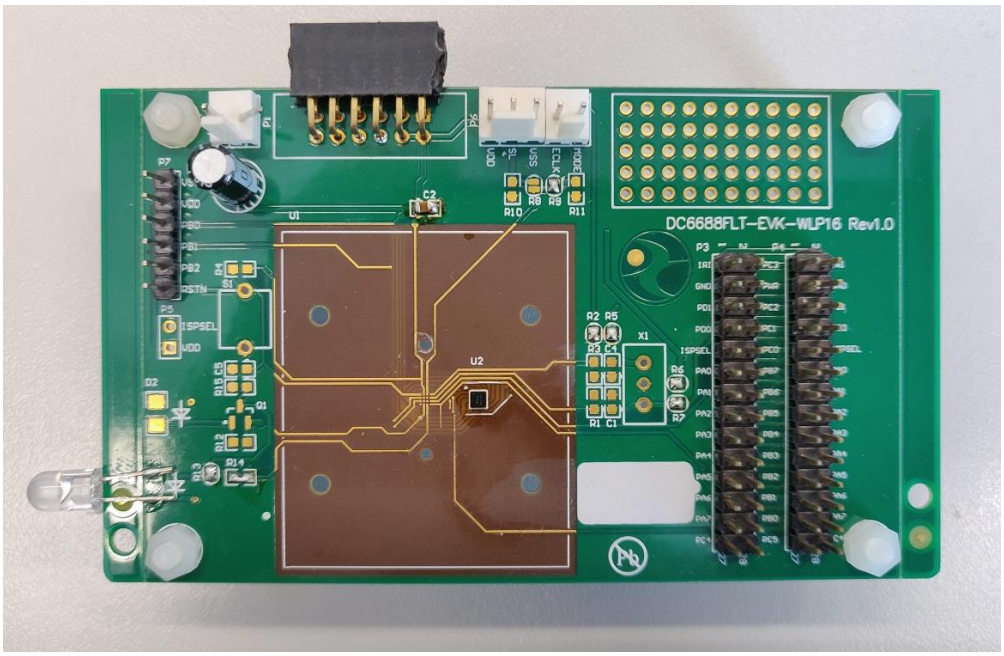
1 Introduction

The Objective of this document is to provide the user a quick start to use evaluation board (DC6688FLT-EVK-WLP16) to download code to device and develop the application. This board is applicable to DC6688FL32TC and DC6688FL32TCC.

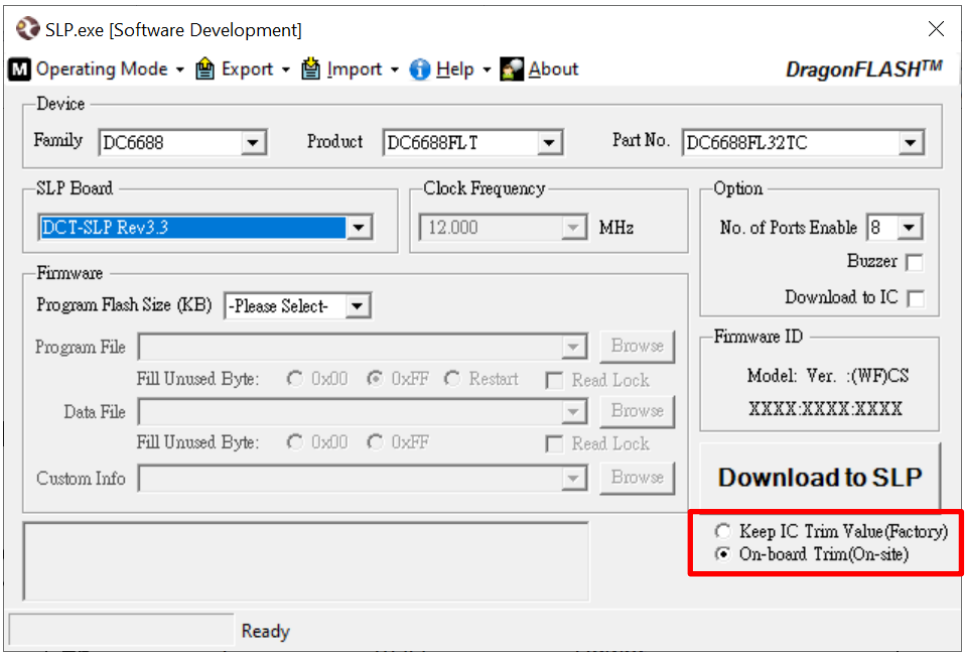
For whole software and hardware setup to download code to device, user can refer to the following document in the programming website.

1. DCT-SLP Rev3.3 (10 ports) User Manual, or DCT-EDP Rev3.0 (1 port) User Manual
2. ISP Programming Interface for DC6688FLT / DC6688FST / DC6688BT



2 SL Programming

There are two types of programming:
1. Keep IC Trim Value
2. On-board Trim



2.1 Keep IC Trim Value

The programming pin can be found from the following connector.
Pin assignment:

Connector	Pin	Name	DCT-EDP Rev3.x / DCT-SLP Rev3.x
P6	1	VDD	VDD
	2	SL	SL
	3	VSS	VSS
	4	ECLK	CLK1
	5	MODE(PROG)	PROG

2.2 On-board Trim

The programming pin can be found from the following connector.
Pin assignment:

Connector	Pin	Name	DCT-EDP Rev3.x / DCT-SLP Rev3.x
P6	1	VDD	VDD
	2	SL	SL
	3	VSS	VSS
	4	ECLK	CLK1
	5	MODE(PROG)	PROG
P3	14	PB6	CLK2

3 I/O interface

3.1 UART

Connector ‘P7’ provides the necessary pins to connect to smartphone.

Pin assignment:

Pin	Name	Function
1	VSS	Ground
2	VDD	Power (1.8V)
3	PB0	UART RXD0 (Input)
4	PB1	UART TXD0 (Output)
5	PB2	-
6	RSTN	Reset (optional)

3.2 GPIO

Connector ‘P4’ pin assignment

Pin	Name	Pin	Name
1	PC3	2	IRI
3	VDD	4	VSS
5	PC2	6	PD1
7	PC1	8	PD0
9	PC0	10	NC
11	PB7	12	PA0
13	PB6	14	PA1
15	PB5	16	PA2
17	PB4	18	PA3
19	PB3	20	PA4
21	PB2	22	PA5
23	PB1	24	PA6
25	PB0	26	PA7
27	PC5	28	PC4

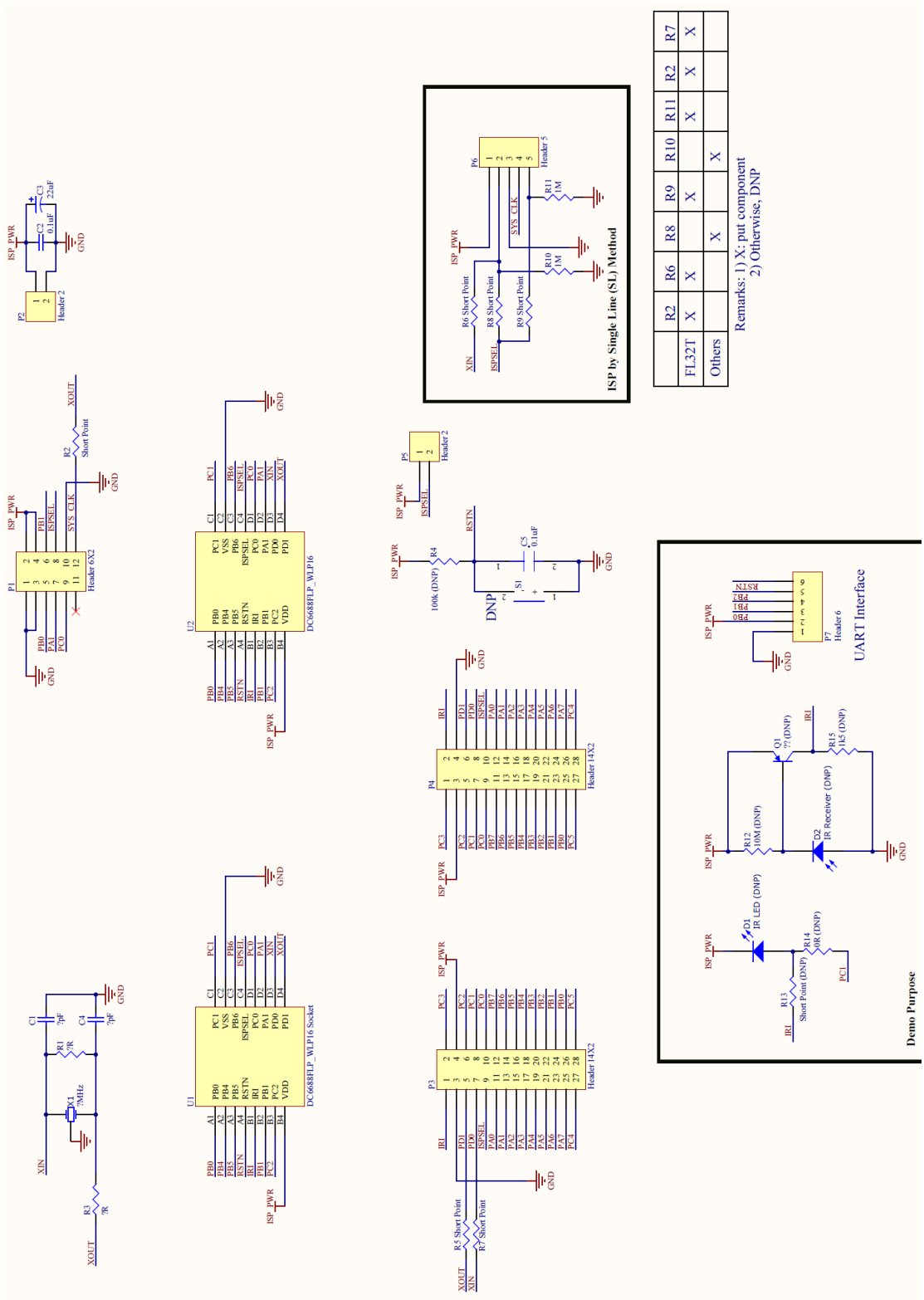
Connector ‘P3’ pin assignment

Pin	Name	Pin	Name
1	IRI	2	PC3
3	VSS	4	VDD
5	PD1	6	PC2
7	PD0	8	PC1
9	NC	10	PC0
11	PA0	12	PB7
13	PA1	14	PB6
15	PA2	16	PB5
17	PA3	18	PB4
19	PA4	20	PB3
21	PA5	22	PB2
23	PA6	24	PB1
25	PA7	26	PB0
27	PC4	28	PC5

4 IR diode

IR diode is the component ‘D1’. It can only work on 3V for demonstration purpose. User need to change to a suitable one for smartphone application.

5 Schematics



Revision History

Document Rev. No.	Issued Date	Section	Page	Description	Edited By	Reviewed By
1.0	Mar, 2020	All		First Release	Danny Ho	Patrick Li
1.1	Jun, 2020	2		Update pin information	Danny Ho	Patrick Li

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