

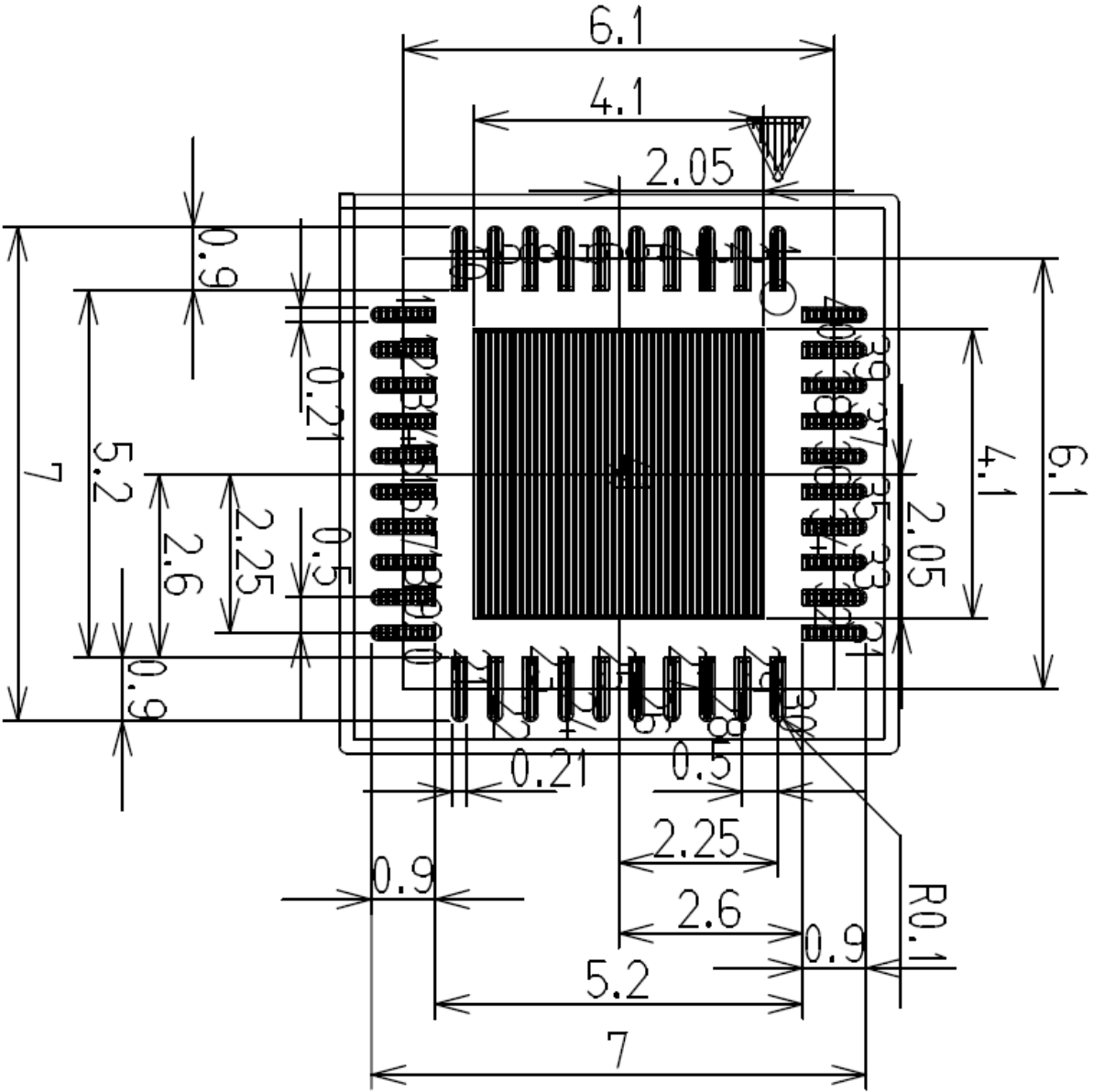
DWI002 Installation Manual

For OEM integration only – device cannot be sold to general public.
Therefore we will ask OEM to include the following statements required by FCC on the product and in the Installation manual Notice.

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1.Land Pattern(Recommended Unit:mm)



2. Supply Voltage

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V_{BAT}	battery supply voltage	Card Emulation and Passive Target; $V_{SS} = 0\text{ V}$	2.3	-	5.5	V
		Reader, Active Initiator and Active Target; $V_{SS} = 0\text{ V}$	2.7	-	5.5	V
V_{DD}	supply voltage	internal supply voltage	1.65	1.8	1.95	V
$V_{DD(PAD)}$	$V_{DD(PAD)}$ supply voltage	supply voltage for host interface				
		1.8 V host supply; $V_{SS} = 0\text{ V}$	1.65	1.8	1.95	V
		3 V host supply; $V_{SS} = 0\text{ V}$	3.0	-	3.6	V

Please supply a stabilized power supply voltage through the VBAT, VDD, and VDD(PAD).

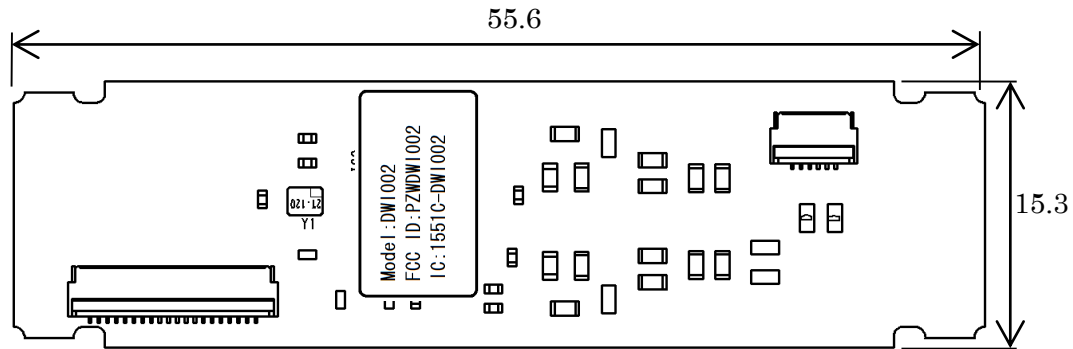
3. Pin configuration

Symbol	Pin	Type	Refer	Description
RXN	15	I	V _{DD}	negative receiver input
RXP	16	I	V _{DD}	positive receiver input
V _{DD(MID)}	17	P	n/a	receiver reference input supply voltage
TX2	18	O	V _{DD(TX)}	antenna driver output
V _{SS(TX)}	19	G	n/a	contactless transmitter ground
n.c.	20	-	-	not connected
TX1	21	O	V _{DD(TX)}	antenna driver output
V _{DD(TX_IN)}	22	P	n/a	transmitter input supply voltage; must be connected to V _{DD(TX)}
i.c.	23	-	-	internally connected; leave open
i.c.	24	-	-	internally connected; leave open
i.c.	25	-	-	internally connected; leave open
V _{BAT}	26	P	n/a	battery supply voltage
V _{SS}	27	G	n/a	ground
V _{DDA}	28	P	n/a	analog supply voltage; must be connected to V _{DD}
V _{DD}	29	P	n/a	supply voltage
V _{DDD}	30	P	n/a	digital supply voltage; must be connected to V _{DD}
n.c.	31	-	-	not connected
n.c.	32	-	-	not connected
n.c.	33	-	-	not connected
n.c.	34	-	-	not connected
n.c.	35	-	-	not connected
NFC_CLK_XTAL1	36	I	V _{DD}	oscillator input/PLL input
NFC_CLK_XTAL2	37	O	V _{DD}	oscillator output
i.c.	38	-	-	internally connected; leave open
i.c.	39	-	-	internally connected; leave open
CLK_REQ	40	O	V _{DD(PAD)}	clock request pin

Symbol	Pin	Type	Refer	Description
I2CADR0	1	I	V _{DD(PAD)}	I ² C-bus address 0
i.c.	2	-	-	internally connected; must be connected to GND
I2CADR1	3	I	V _{DD(PAD)}	I ² C-bus address 1
V _{SS(PAD)}	4	G	n/a	pad ground
I2CSDA	5	I/O	V _{DD(PAD)}	I ² C-bus data line
V _{DD(PAD)}	6	P	n/a	pad supply voltage
I2CSCL	7	I	V _{DD(PAD)}	I ² C-bus clock line
IRQ	8	O	V _{DD(PAD)}	interrupt request output
V _{SS}	9	G	n/a	ground
VEN	10	I	V _{BAT}	reset pin. Set the device in Hard Power Down
i.c.	11	-	-	internally connected; leave open
V _{BAT2}	12	P	n/a	battery supply voltage; must be connected to V _{BAT}
V _{BAT1}	13	P	n/a	battery supply voltage; must be connected to V _{BAT}
V _{DD(TX)}	14	P	n/a	transmitter supply voltage

4. Install

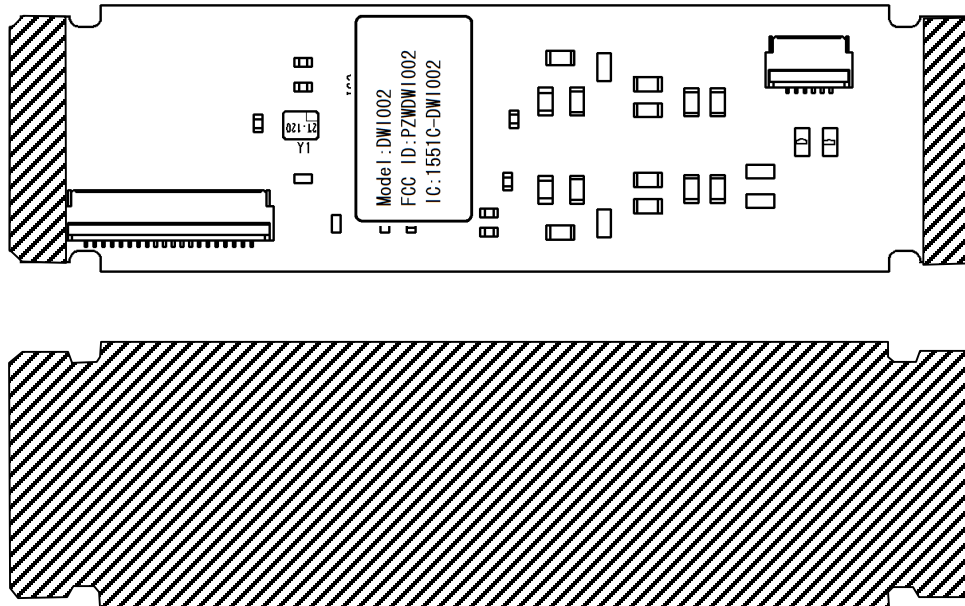
◆ Product dimensions



◆ Product fixation method

Please fix the hatched area.

Adhesive fixation or pinching fixation is recommended.



5. Notice

Please describe the following warning on the final product which contains this module.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Please describe the following warning to the manual.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without maximum permissive exposure evaluation (MPE).

FCC CAUTION:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

The product complies with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This device is intended only for OEM integrators under the following conditions:

The transmitter module may not be co-located with any other transmitter or antenna. As long as 1 condition above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

IMPORTANT NOTE: In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

The final end product must be labeled in a visible area with the following: “Contains FCC ID: PZWDWI002”. The grantee's FCC ID can be used only when all FCC compliance requirements are met.

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Industry Canada Statement

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:

The product comply with the Canada mobile RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils mobile RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

This device is intended only for OEM integrators under the following conditions:

1) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 1 condition above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:

1) Le module émetteur peut ne pas être coïmplanté avec un autre émetteur ou antenne.

Tant que les 1 condition ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requis pour ce module installé.

IMPORTANT NOTE:

In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

NOTE IMPORTANTE:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considéré comme valide et l'ID IC ne peut pas être utilisé sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

End Product Labeling

The final end product must be labeled in a visible area with the following: "Contains IC: 1551C-DWI002".

Plaque signalétique du produit final

Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante: "Contient des IC: 1551C-DWI002".

Manual Information To the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.