

Precautions for use

78K0/IB2 PFC LED Lighting Evaluation Board

ZBB-CB-11-0021-E

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Safety Precautions

This document explains matters to be noted for safe use of this evaluation board. Be sure to read this document before using this evaluation board.







- Be sure to observe all dangers, warnings, cautions, and other instructions contained herein when using this evaluation board.
- This document should be kept handy at all times for ready reference.

Symbols used

This document used the following symbols for matters to be observed for the safe use of the unit. The symbols are followed by a brief explanation of the possible extent of problems which may occur if the notices are not observed.

	Danger	The user may suffer death or serious injury and it's risk is high if the warning is not observed.
	Warning	The user may suffer death or serious injury if the warning is not observed.
	Caution	Human injury or property damage may occur if the caution is not observed.

The following symbols express matters which are prohibited in order to prevent injury or accident.

	General prohibition The action mentioned is prohibited.		Do not touch Touching the specified location may cause injury.		Do not disassemble Disassembly may cause a problem such as electrical shock or product failure.
	Keep away from water Use near water poses the risk of electrical shock or product failure if moisture were to contact the unit.		Flammable A nearby flame may cause the unit to catch fire.		Do not touch with wet hands Touching with wet hands may cause electric shock or product failure.














The following symbols are used for cautions to prevent product failure and accidents.

	General caution Unspecified general cautions.		Caution Hot Human injury by high temperature may occur.
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The following symbols are used for instructions to prevent product failure and accidents.

	Compulsory action based on an instruction for the user.		Instruction to unplug from AC power supply.
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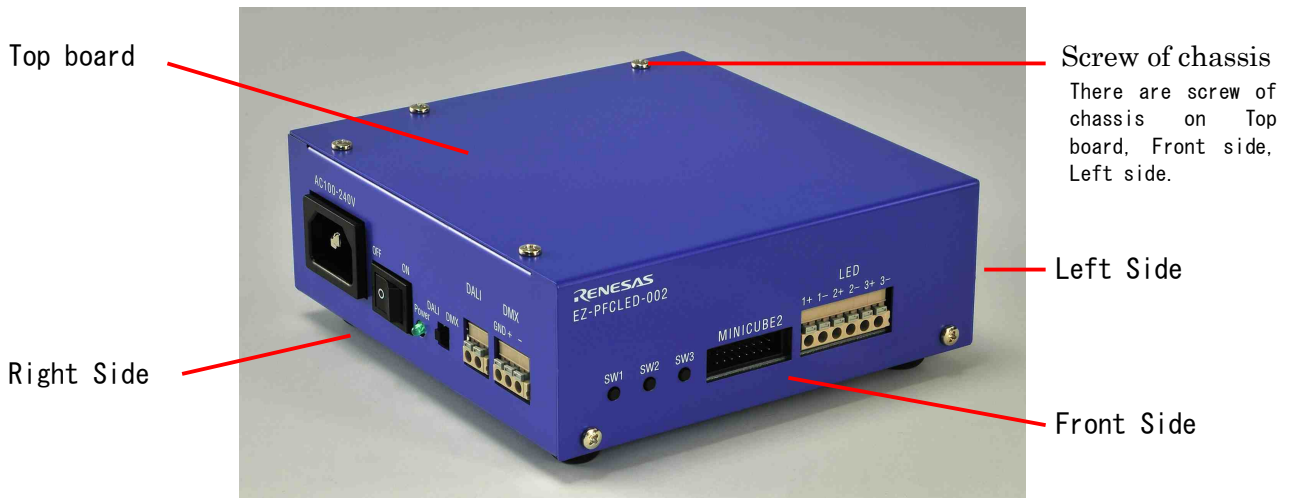
Warnings

 Danger	
	<p>Do not use this board in the purpose except the evaluation of MCU. This board is developed for Power electronics engineer and it use is only for MCU evaluation. This board does not take safety measures or anti-EMI measures required for lighting equipment and power supply unit.</p>
	<p>Do not use this board in other countries outside Japan. This board is assumed to be used only in Japan and it may not comply with regulation or standards of any other countries except for Japan about any other countries.</p>
	<p>Do not touch to the high voltage area of the board. Touching the board by tools or body while power is being supplied cause product failure or electric shock.</p>
	<p>Do not touch with wet hands. Doing so cause product failure or electrical shock.</p>
	<p>Do not use or store this board in any of the following locations.</p> <ul style="list-style-type: none"> - Environments with copious water, humidity, steam, dust, fumes, etc. - Environments where static electricity or electrical noise is readily generated. <p>Such influences can lead to electric shock or product failure.</p>
	<ul style="list-style-type: none"> - Use glove to protect electric shock. - Limit the user of this board.
 Warning	
	<p>Be careful to burns. The part of board becomes high temperature during AC power is connected.</p>
	<p>Do not disassemble or modify the board. Doing so may cause product failure, emission of smoke, fire or electric shock.</p>
	<p>Do not heat the board or expose it to fire and do not short the terminals. Doing so may cause product failure, generation of heat, fire or rupture.</p>
	<p>Do not drop or jolt the board. Doing so may break or damage the board, causing fire or electric shock.</p>
	<p>Use AC power supply in the range of AC100V~240V. Using AC power supply out of this range may cause product failure, generation of heat, fire or electric shock.</p>
	<p>Do not plug in or unplug a connector or cable with power applied to the board. Doing so may cause product failure, generation of heat, fire or rupture.</p>
	<p>Do not turn on the power switch in insufficient state of each cable connection such as AC power cable, LED connection cable and interface cable. Doing so may cause product failure, generation of heat, fire or electric shock.</p>
	<p>Do not carry this board with connecting any cable. Doing so may cause damage of cable and cause product failure, generation of heat, fire or electric shock.</p>
	<p>Do not use except the AC power cable attached to this board. Do not use any AC power cable except for attached it to this board. Using a incompatible cable may cause product failure, generation of heat, fire or electric shock.</p>
	<p>Do not put or leave any electrical conductor, if you open the chassis. A conductor on the circuit of the board may cause product failure, generation of heat, fire or electric shock.</p>
	<p>Confirm the outlet is near this board and easily unplugged.</p>

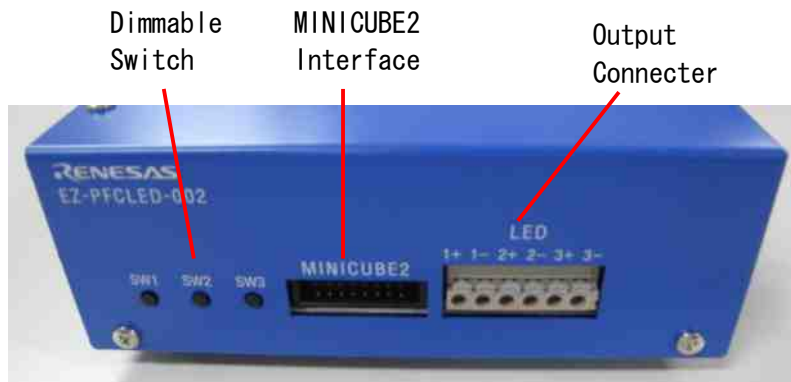


If smoke or an abnormal smell or sound is emitted or heating occurs, promptly switch off the board power and unplug from AC power supply.
Using the board in such a state poses a risk of fire, burning or electric shock.

Appearance of the board



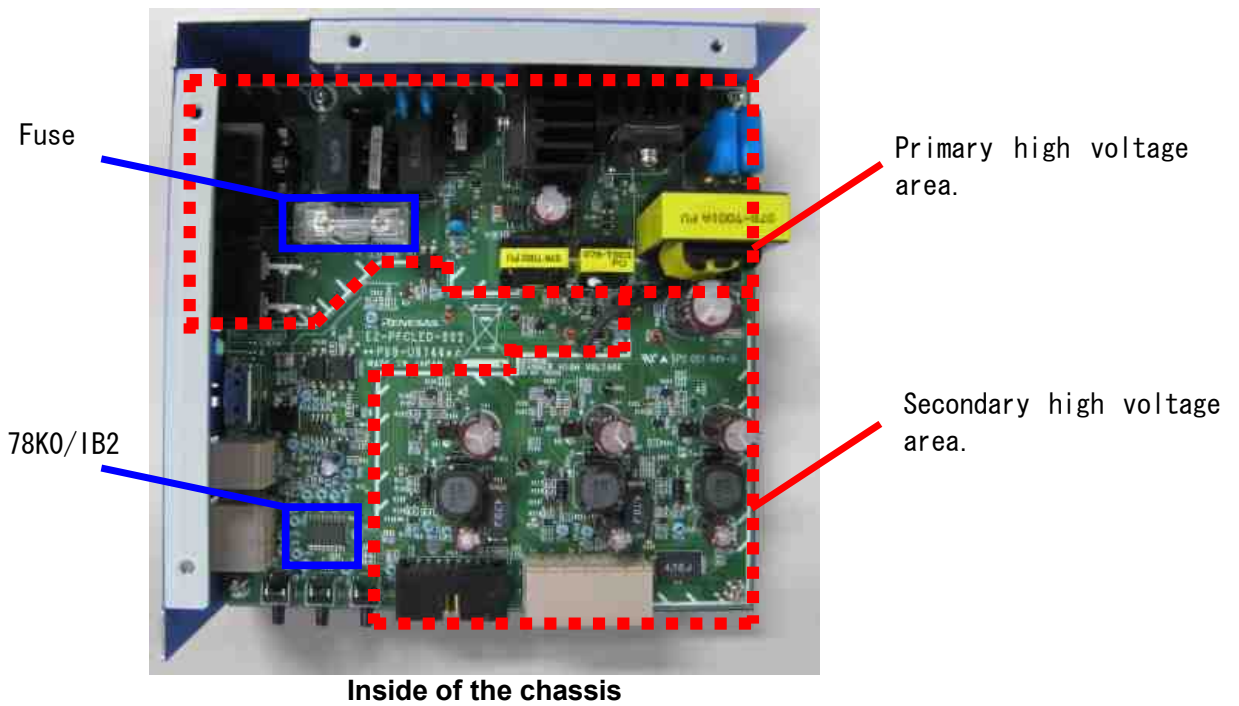
Appearance of the chassis






Front Side



Right Side



 Danger	
	<p>Do not touch the area enclosed with RED line because of high voltage while power is being supplied. This area is also indicated by white heavy line on the board.</p>
	<p>Do not put or leave any electrical conductor, if you open the chassis. A conductor on the circuit of the board may cause product failure, generation of heat, fire or electric shock.</p>

As for usage of this board, please download the User's Manual from following URL.

URL: <http://www2.renesas.com/micro/ja/solution/lighting/download.html>