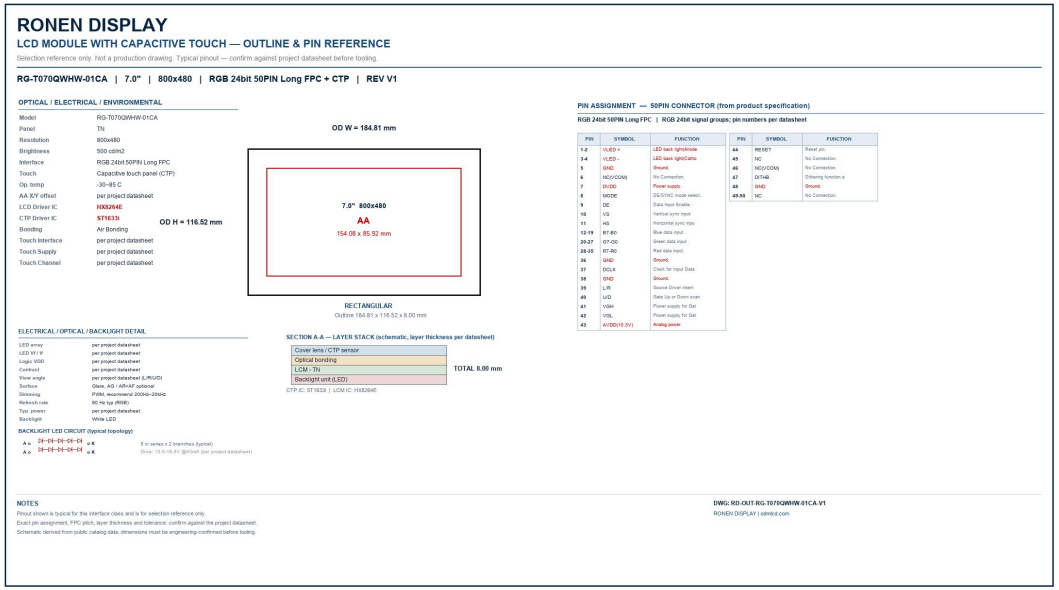
RONEN DISPLAY

LCD Module Datasheet

RG-T070QWHW-01CA

SPECIFICATION

Display Size	7.0 inch
Resolution	800x480
LCD Type / Shape	TN
Luminance	500 cd/m2
Module Interface	RGB 24bit 50PIN Long FPC
Touch Option	Capacitive touch panel (CTP)
Active Area (mm)	154.08x85.92
Outline Dim. (mm)	184.81x116.52x8.00
Operating Temp. (°C)	-30 ~ +85 degC
Storage Temp. (°C)	-30 ~ +85 degC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LCD MODULE WITH CAPACITIVE TOUCH — OUTLINE & PIN REFERENCE

Selection reference only. Not a production drawing. Typical pinout — confirm against project datasheet before tooling.

RG-T070QWHW-01CA | 7.0" | 800x480 | RGB 24bit 50PIN Long FPC + CTP | REV V1

OPTICAL / ELECTRICAL / ENVIRONMENTAL

Model	RG-T070QWHW-01CA
Panel	TN
Resolution	800x480
Brightness	500 cd/m2
Interface	RGB 24bit 50PIN Long FPC
Touch	Capacitive touch panel (CTP)
Op. temp	-30~85 C
AA X/Y offset	per project datasheet
LCD Driver IC	HX8264E
CTP Driver IC	ST1633i
Bonding	Air Bonding
Touch Interface	per project datasheet
Touch Supply	per project datasheet
Touch Channel	per project datasheet

OD W = 184.81 mm

OD H = 116.52 mm

7.0" 800x480

AA

154.08 x 85.92 mm

RECTANGULAR

Outline 184.81 x 116.52 x 8.00 mm

PIN ASSIGNMENT — 50PIN CONNECTOR (from product specification)

RGB 24bit 50PIN Long FPC | RGB 24bit signal groups; pin numbers per datasheet

PIN	SYMBOL	FUNCTION
1-2	VLED +	LED back light(Anode
3-4	VLED -	LED back light(Cathe
5	GND	Ground.
6	NC/(COM)	No Connection
7	DVDD	Power supply.
8	MODE	DE/SYNC mode select.
9	DE	Data input Enable.
10	VS	Vertical sync input.
11	HS	Horizontal sync inpu
12-19	B7-B0	Blue data input .
20-27	G7-G0	Green data input .
28-35	R7-R0	Red data input.
36	GND	Ground.
37	DCLK	Clock for Input Data
38	GND	Ground.
39	L/R	Source Driver inten
40	U/D	Gate Up or Down scan
41	VGH	Power supply for Gat
42	VGL	Power supply for Gat
43	AVDD(10.2V)	Analog power

PIN	SYMBOL	FUNCTION
44	RESET	Reset pin.
45	NC	No Connection.
46	NC/(COM)	No Connection.
47	DITHB	Dithering function a
48	GND	Ground.
49-50	NC	No Connection.

ELECTRICAL / OPTICAL / BACKLIGHT DETAIL

LED array	per project datasheet
LED Vf / If	per project datasheet
Logic VDD	per project datasheet
Contrast	per project datasheet
View angle	per project datasheet (L/R/U/D)
Surface	Glare, AG / AR+AF optional
Dimming	PWM, recommend 200Hz–20kHz
Refresh rate	60 Hz typ (RGB)
Typ. power	per project datasheet
Backlight	White LED

BACKLIGHT LED CIRCUIT (typical topology)

A o — |▷|-|▷|-|▷|-|▷|-|▷|- — o K

A o — |▷|-|▷|-|▷|-|▷|-|▷|- — o K

8 in series x 2 branches (typical)

Drive: 19.5–38.5V @60mA (per project datasheet)

SECTION A-A — LAYER STACK (schematic, layer thickness per datasheet)

Cover lens / CTP sensor
Optical bonding
LCM - TN
Backlight unit (LED)

TOTAL 8.00 mm

CTP IC: ST1633i | LCM IC: HX8264E

NOTES

Pinout shown is typical for this interface class and is for selection reference only.

Exact pin assignment, FPC pitch, layer thickness and tolerance: confirm against the project datasheet.

Schematic derived from public catalog data; dimensions must be engineering-confirmed before tooling.

DWG: RD-OUT-RG-T070QWHW-01CA-V1

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Outline drawing - for reference only; confirm with latest datasheet.

Notes

Values are typical at 25 degC unless otherwise specified. Full drawing, pin assignment and qualification data available on request. Sales terms are confirmed per project.

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