

GRAPHICS ENGINE



RA8876

Display everywhere,
Control whatever.

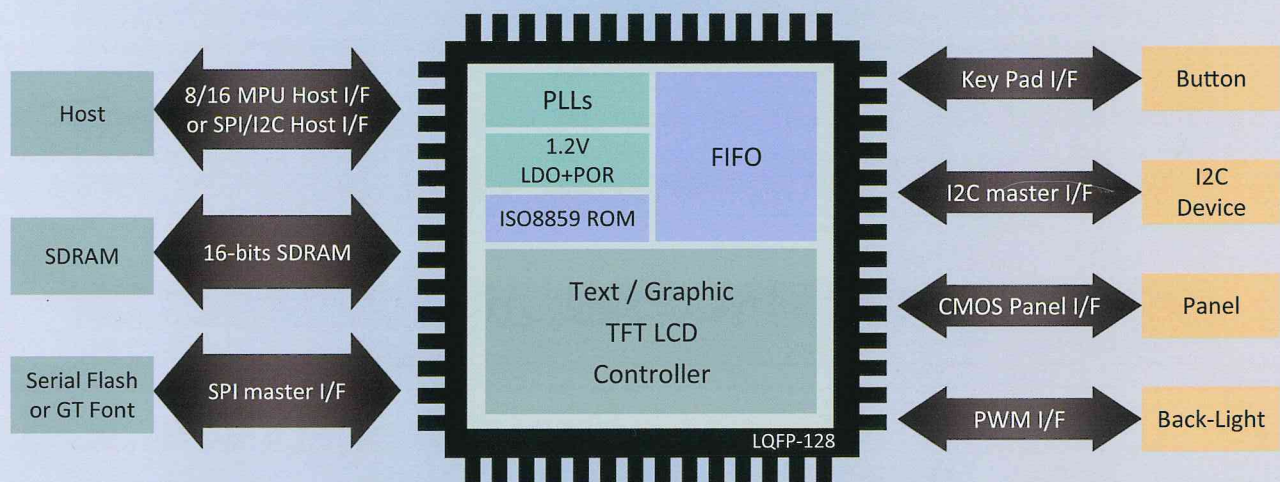
★ Application

- Medical Appliances
- Industrial Machines
- Electric Lift Control
- IA Products
- Measurement Equipments
- Financial Machines
- Touch-screen Learning Remote

★ Features Summary

- Resolution up to 2048 x 2048
- Supports Mono / 256 / 65K / 16.7M colors
- Supports SPI 3 | 4, IIC Serial MCU I/F
- External SDRAM up to 512Mbits
- Programmable Text / Graphic Cursor
- Embedded ASCII Font
- Supports Alpha-Blend

Application Diagram



總公司

300新竹科學工業園區工業東四路19-1號7樓
7F, No.19-1, Industry East 4th Road, Hsinchu Science Park,
Hsinchu, Taiwan
TEL : +886-3-5637888 FAX : +886-3-5637666

深圳办事处

TEL : +86-755-8347-4759 FAX : +86-755-8347-4946
E-mail : sales@raio.com.tw



TFT LCD Controller

Functions	RA8872	RA8870	RA8875	RA8876
Resolution(Max)	320 x 240	640 x 480	800 x 480	2048 x 2048
Colors(Max)	256 / 4K / 65K	256 / 4K / 65K	256 / 65K	Mono / 256 / 65K / 16.7M
Panel Type	Digital	Digital / Analog	Digital	Digital
Parallel MPU Interface	8-Bits	8/16-Bits	8/16-Bits	8/16-Bits
Serial MCU I/F	--	--	SPI 3 4 / IIC	SPI 3 4 / IIC
Master I/F	--	--	--	SPI / IIC
Embedded Display RAM	230KB	230KB	768KB	--
External SDRAM	--	--	--	Up to 512Mbits
Embedded ASCII Font	ISO-8859 Latin 1~4	ISO-8859 Latin 1~4	ISO-8859 Latin 1~4	ISO-8859 Latin 1, 2, 4, 5
External Font ROM I/F	--	Parallel	Serial	Serial
Touch Panel Controller	4-Wires	4 / 5-Wires	4-Wires	--
Block Transfer Engine	▲	▲	▲	▲
Geometric Speed-up Engine	▲	▲	▲	▲
Virtual Display	--	--	--	Multi Buffer Display
Picture-in-Picture	--	--	--	▲
Dual Pages Mode	▲	▲	▲	▲
Horizontal Scroll	▲	▲	▲	▲
Vertical Scroll	▲	▲	▲	▲
Graphic/Font Rotation	▲	▲	▲	▲
Programmable Text Cursor	▲	▲	▲	▲
Support Graphic Cursor	▲	▲	▲	▲
User-defined Characters.	▲	▲	▲	▲
Alpha-Blending	--	--	--	▲
DMA	--	--	▲	▲
PWM O/P	2	2	2	2
Smart Key-Scan	--	--	4*5	5*5
GPIO	6	6	9	Max 40
Clock Source	X'tal + PLL	X'tal + PLL	X'tal + PLL	X'tal + PLL
Operation Voltage	3.0 ~ 3.6V	3.0 ~ 3.6V	3.0 ~ 3.6V	3.0 ~ 3.6V
Package	LQFP-100	TQFP-128	LQFP-100	LQFP-128
Operation Temperature	-30 ~ +85°C	-30 ~ +85°C	-30 ~ +85°C	-30 ~ +85°C

COLOR TN Driver
TFT LCD Controller

COLOR TN Driver

NO.	Common	Segment	Logic Voltage	Colors	Embedded LED Driver	Package
RA8860	2	80	2.7~5.5V	8 / 16	Yes	Die / LQFP-128

