深圳市金逸晨电子有限公司

LCD MODULE

MODULE NO.:

0.49" I2C SERIES

Customer:		
Approved By(核准):		

深圳市金逸晨电子有限公司			
Approved By(核准):	Checked By(审核):	Prepared By(编写):	

0.49" I2C SERIES Version V1.0

RECORDS OF REVISION

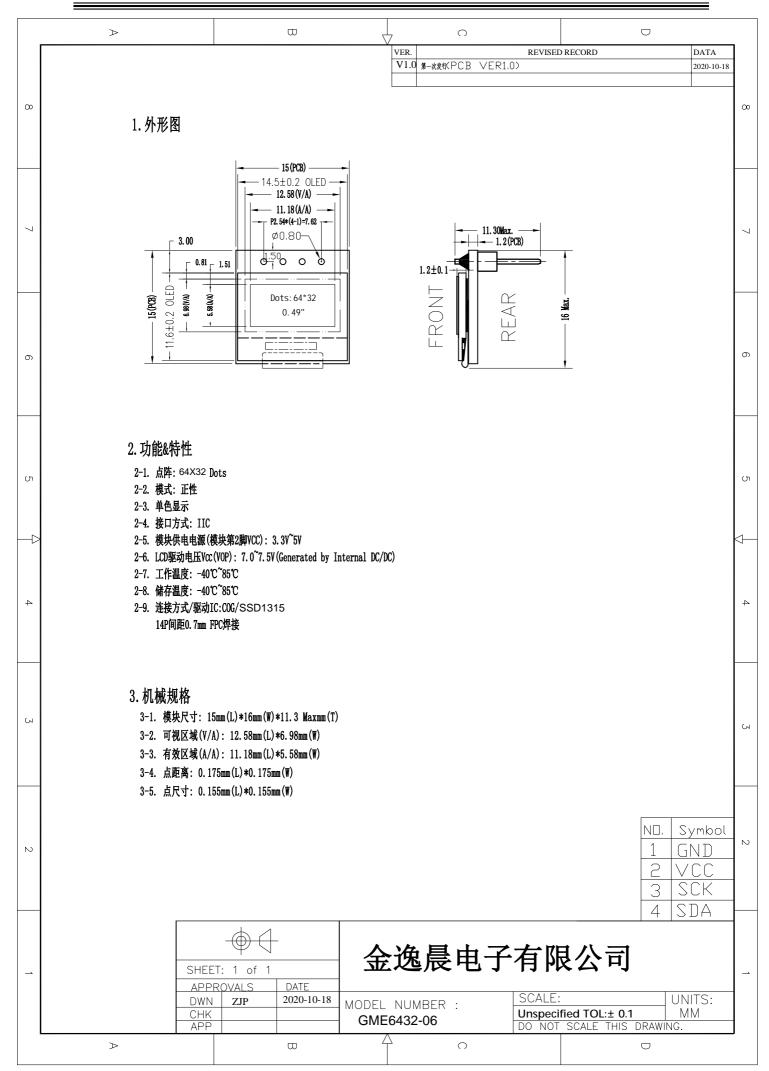
(修订记录)

Part Number (产品型号)	Revision (版本)	Revision Content (修订内容)	Revised on (修订日期)
0.49" I2C SERIES	V <i>1.0</i>	第一次发行	2020-10-22

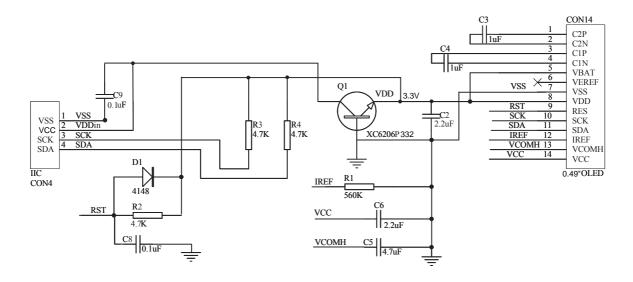
7

CONTENTS	
外形图	4
功能&特性	
机械规格	4
原理图	5
引脚说明	5
电气特性	6
6.1 DC电气特性	6
	外形图

6.2 AC电气特性_____



4. 原理图:



5. 引脚说明:

Pin no.	Symbol	Function
1	GND	地
2	VCC	电源输入供电电压(3.3~5V)
3	SCK	时钟
4	SDA	数据

Version V1.0 0.49" I2C SERIES 6

6. 电气特性

6-1, DC Characteristics

Characteristics	Symbol	Conditions	Min	Тур	Max	Unit
Supply Voltage for Logic	V_{DD}		1.65	2.8	3.3	V
Supply Voltage for Display (Supplied Externally)	V _{CC}	Note 5 (Internal DC/DC Disable)	7	-	9.0	V
Supply Voltage for DC/DC	$V_{\it BAT}$	Internal DC/DC Enable	3.5	-	4.2	V
Supply Voltage for Display (Generated by Internal DC/DC)	V _{cc}	Note 6 (Internal DC/DC Enable)	7	7.25	7.5	V
High Level Input	V_{IH}	$I_{OUT} = 100 \mu A, 3.3 MHz$	$0.8 \times V_{DD}$	-	V_{DD}	V
Low Level Input	V_{IL}	$I_{OUT} = 100 \mu A, 3.3 MHz$	0	-	0.2×V _{DD}	V
High Level Output	V _{OH}	$I_{OUT} = 100 \mu A, 3.3 MHz$	0.9×V _{DD}	_	V_{DD}	V
Low Level Output	V _{OL}	$I_{OUT} = 100 \mu A, 3.3 MHz$	0	-	0.1×V _{DD}	V
Operating Current for V _{DD}	I_{DD}		-	180	300	μA
Operating Current for V _{CC} (V _{CC} Supplied Externally)	I_{CC}	Note 7	-	7	13	mA
Operating Current for V _{RAT} (V _{CC} Generated by Internal DC/DC)	$ extbf{\emph{I}}_{\it{BAT}}$	Note 8	-	12	17	mA
Sleep Mode Current for V _{DD}	$I_{\text{DD, SLEEP}}$		-	1	5	μA
Sleep Mode Current for V _{CC}	$I_{\text{CC, SLEEP}}$			2	10	μA

Note 5 & 6: Brightness (L_{br}) and Supply Voltage for Display (V_{CC}) are subject to the change of the panel characteristics and the customer's request.

Note 7: $V_{DD} = 2.8V$, $V_{CC} = 7.25V$, 100% Display Area Turn on. Note 8: $V_{DD} = 2.8V$, $V_{CC} = 7.25V$, 100% Display Area Turn on. * Software configuration follows Section 4.4 Initialization.

0.49" I2C SERIES Version V1.0 7

6-2、AC电气特性

I²C Interface Timing Characteristics:

Symbol	Description		Max	Unit
t _{cycle}	Clock Cycle Time	2.5	-	μs
t _{HSTART}	Start Condition Hold Time	0.6	_	μs
L	Data Hold Time (for "SDA _{OUT} " Pin)			
t_{HD}	Data Hold Time (for "SDA _{IN} " Pin)	300	-	ns
t _{SD}	Data Setup Time	100	_	ns
t _{SSTART}	Start Condition Setup Time (Only relevant for a repeated Start condition)	0.6	-	μs
t _{SSTOP}	Stop Condition Setup Time	0.6	-	μs
t _R	Rise Time for Data and Clock Pin		300	ns
t _F	Fall Time for Data and Clock Pin		300	ns
t _{IDLE}	Idle Time before a New Transmission can Start	1.3	-	μs

^{*} $(V_{DD} - V_{SS} = 1.65V \text{ to } 3.3V, T_a = 25^{\circ}C)$

