



Product Change Notification

PCN No: 2006-10-18-01

Report Date: October 18, 2006

Subject: LK204-24 PCB 1.2 New Board Revision Release

List of New Products:

- LK204-24-USB PCB 1.2 including all applicable extensions and combinations

-WB, -GW, -IY, -R, -YG (display colour)

-VPT, -V, -E (power and temperature options)
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- MX4 including all applicable extensions and combinations (MX400-434)

Reason for Change:

The LK204-24-USB Matrix Orbital module series have been upgraded to be RoHS compliant.

Product Change:

The following list of hardware and firmware changes are all effective on all the variants of the LK204-24-USB as stated under the 'List of New Products'. The old LK204-24-USB PCB 1.1 is now superseded by the LK204-24-USB PCB 1.2. The changes are stated to compare the old and the new revisions:

Hardware Changes:

- 1) PCB 1.2 is full RoHS compliant; some small components have been replaced by their RoHS compliant equivalent.
- 2) Pads for 4 components on the board have been changed for ease of

manufacturing.

- 3) Cosmetics changes such as our Matrix Orbital logo have been added on the board.
- 4) There are no changes on the physical location of the connectors on the new PCB revision.
- 5) To provide more multilingual (European) support to our modules, we have started using European font displays with the LK204-24-USB's. Please see the following character set for the European font display and the (old) Japanese font display for comparison.

European Font Character Set

Upper 4 bit Lower 4 bit	LLLL	LLLH	LLHL	LLHH	LHLL	LHLH	LHHL	LHHH	HLLL	HLLH	HLHL	HLHH	HHLL	HHLH	HHHL	HHHH
LLLL		±		⊖	⊙	Ⓟ	Ⓠ	Ⓡ	Ⓢ	Ⓣ	Ⓤ	Ⓥ	Ⓦ	Ⓧ	Ⓨ	Ⓩ
LLLH		≡	!	1	A	Q	g	9	U	æ	ı	ˆ	J	†	Y	0
LLHL		7	"	2	B	R	b	r	g	ε	g	ˆ	∞	≡	g	æ
LLHH		△	#	3	O	S	ε	ε	g	g	g	ˆ	∞	∞	≡	μ
LHLL		Y	*	4	O	T	d	t	g	g	g	ˆ	∞	∞	≡	ω
LHLH		U	g	5	E	U	e	u	g	g	g	ˆ	∞	∞	≡	π
LHHL		Y	&	6	F	U	f	u	g	g	g	ˆ	∞	∞	≡	π
LHHH		J	'	7	G	W	w	w	g	g	g	ˆ	∞	∞	≡	π
HLLL		J	0	8	H	h	h	h	g	g	g	ˆ	∞	∞	≡	π
HLLH		U	9	I	Y	i	y	g	g	g	ˆ	∞	∞	≡	π	π
HLHL		g	*	J	Z	z	z	z	g	g	g	ˆ	∞	∞	≡	π
HLHH		J	+	*	K	k	k	k	g	g	g	ˆ	∞	∞	≡	π
HHLL		=	,	<	L	l	l	l	g	g	g	ˆ	∞	∞	≡	π
HHLH		∞	-	=	M	m	m	m	g	g	g	ˆ	∞	∞	≡	π
HHHL		g	.	>	N	n	n	n	g	g	g	ˆ	∞	∞	≡	π
HHHH		g	/	?	O	o	o	o	g	g	g	ˆ	∞	∞	≡	π

Japanese Font Character Set

D7	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
D6	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
D5	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
D4	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
D3 D2 D1 D0	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0 0 0 0	0			0	a	P	`	P			-	ア	エ	オ	カ	ク
0 0 0 1	1		!	1	Q	a	q				。	フ	チ	セ	ケ	ク
0 0 1 0	2		"	2	R	b	r				「	イ	ツ	×	ベ	セ
0 0 1 1	3		#	3	S	c	s				」	ウ	テ	エ	セ	ソ
0 1 0 0	4		\$	4	T	d	t				、	エ	ト	ト	ホ	カ
0 1 0 1	5		%	5	U	e	u				=	ア	ナ	レ	カ	ク
0 1 1 0	6		&	6	V	f	v				ワ	カ	ニ	ヨ	カ	ク
0 1 1 1	7		'	7	W	g	w				フ	チ	ヌ	レ	カ	ク
1 0 0 0	8		(8	X	h	x				、	カ	ナ	レ	カ	ク
1 0 0 1	9)	9	Y	i	y				、	カ	ナ	レ	カ	ク
1 0 1 0	A		*	:	J	Z	j	z			、	カ	ナ	レ	カ	ク
1 0 1 1	B		+	;	K	I	k	i			、	カ	ナ	レ	カ	ク
1 1 0 0	C		,	<	L	#	l	#			、	カ	ナ	レ	カ	ク
1 1 0 1	D		-	=	M	i	n	>			、	カ	ナ	レ	カ	ク
1 1 1 0	E		.	>	N	^	n	+			、	カ	ナ	レ	カ	ク
1 1 1 1	F		/	?	O	_	o	←			、	カ	ナ	レ	カ	ク

We started using European font displays with the -WB, -IR, -IY(colour) modules in April, 2006; and with -YG and -GW in June, 2006. Rollover is continuous to confirm which character set your module will be arriving with. You can also request your sales representative for a character set preference you may have.

Firmware Changes:

There are no firmware changes. The firmware remains at v1.1

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Reference Documents/Attachments:

Location: <http://www.matrixorbital.ca/manuals/>

Approvals:

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