



2P0500

V1. 02

2025 09

自主决定命运, 创新成就未来



4R2722

4R2722

1

4R2722 1 UQE

C6

4R2722

4R2722

NC586 86

N3 Ece:jg*KlF+ 54MD N4

Ece:jg 734MD 972O J |

NC354 54

622O J |

3 54 FFT5

4 32O1322O13222O IOCE TIOKKIOKK

5 WUD402 JQUV 3 QVI

6 URK 3

3 : NUW

3 3 CHGIEKU

3 6 : FC

6 K4E

: WCTV

4 UFKQ

62 RYO

5 ROKQ

35; IRKQ

3

TVEIJRGV

FHU1FRO



1.1

4R2722

Ecejg KQ Ecejg Ecejg KQFOC

IOCE WUD KOCIG RTKPV UECF

K4E WCTV

4R2722

3/3



303 4R2722

1.2

30403

NC586 NC354

Nqqpi Ctej

3 86

54MD Ecejg 54MD Ecejg

734MD Ecejg

KIQ FOC Ecejg

LVC I



30404

54 FFT5 622O J |
54138

30405 USB

5 WUD402 J QUV
3 QVI
WUD303 WUD402
GJEK 6:2Odru
QJEK

30406 GMAC

32132213222Odru OCE
KGGG :2405
RJ [T I O K K I O K K
1
Vko guvc o r
EUOCIEF
ETE

30407 SPI

6
* URK2 +
KIQ URK Hncuj



30408 **UART**

3 WCTV VZF.TZF.EVU. TVU. FUT.FVT.FEF. TK
: WCTV



304033 **PMIO**

5 ROKQ

:2

C''



{ 30605 @ 2P0500 B }

8 @ • ” (p

Y @ Y @ Y

RTVaURkaEUP	Q	øjz		XFFa5X5		
RTVaURkaOQUK	Q	øjz		XFFa5X5		
RTVaURkaOKUQ	K			XFFa5X5		
UECaURkaENM	Q	øj2		XFFa5X5		
UECaURkaEUP	Q	øjz		XFFa5X5		
UECaURkaOQUK	Q	øjz		XFFa5X5		
UECaURkaOKUQ	K			XFFa5X5		

2.5 UART

WCTVJ3<2_aVZF	Q	øj3		XFFa5X5		
WCTVJ3<2_aTZF	K			XFFa5X5		
RTVaWCTVaVZF	Q	øj3		XFFa5X5		
RTVaWCTVaTZF	K			XFFa5X5		
UECaWCTVaVZF	Q	øj3		XFFa5X5		
UECaWCTVaTZF	K			XFFa5X5		

4R2722

*WCTV2+

*WCTV3+

WCTV2

4z6 6z4

WCTV

WCTV3

3z6 4z4







2.16



rtvawctv2atz	r o2kq]2_	rtvar y o]2_	RTVa IRkQ22
rtvawctv2avz	r o2kq]3_	rtvar y o]3_	RTVa IRkQ23
rtvak4e2auen	r o2kq]4_	rtvar y o]4_	RTVa IRkQ24
rtvak4e2aufc	r o2kq]5_	rtvar y o]5_	RTVa IRkQ25
rtvak4e3auen	rtvawctv3atz	rtvar y o]6_	RTVa IRkQ26
rtvak4e3aufc	rtvawctv3avz	rtvar y o]7_	RTVa IRkQ27
rtvaurkaemm	i oce2aeqñ	rtvar y o]8_	RTVa IRkQ28
rtvaurka okuq	i oce2aetu	rtvar y o]9_	RTVa IRkQ29
rtvaurka o quk	i oce2arvravtki	rtvar y o]:_	RTVa IRkQ2:
rtvaurkaeu	i oce2arvrarru	rtvar y o]:_	

ñ.

321

321

D B/E

E B/E

r



2P0500

uecaekuem]4_	r o2kq]4:_	r o3kq]4:_	UECa IRKQ56
uecaekurmu]2_	r o2kq]4;_	r o3kq]4;_	UECa IRKQ57
uecaekur y o	r o2kq]52_	r o3kq]52_	UECa IRKQ58



3

3.1 DDR3



4R2722

50303 DDR3

355/6220 J \

50304 DDR3

4R2722	3	EU	3;	38
5	Dcpm			
			FFT5	
	EUap	3	TCUap	38
ECUap	38	DCPMap	5	
ERW				

ERW OEV

ρ, _ f ~ Öý s, ÈGý)\$ € RSS`-PT@ P
uncx ` x

B5155

es O1 M



3.2 USB

4R2722 WUD
 WUD Tgx 303 WUD Tgx 402
 QJEK Tgx 302 GJEK Tgx 302
 NU Nqy Urggf HU Hwnm Urggf JU Jkij Urggf WUD

WUD402
 WUD402 GJEK
 QJEK GJEK
 QJEK
 GJEK

3.3 OTG

4R2722 QVI <
 JPR UTR
 FOC QVI
 fgxkeg 6:2Odru
 jquv 6:2Odru
 fgxkeg 32 gpfrqkpv gpfrqkp2

fgxkeg 6 KP
 jquv 34 ejcppgn ejcppgn
 jquv rgtkqfke QWV

3.4 GMAC

4R2722 IOCE IOCE2 IOCE3

3.5 SPI

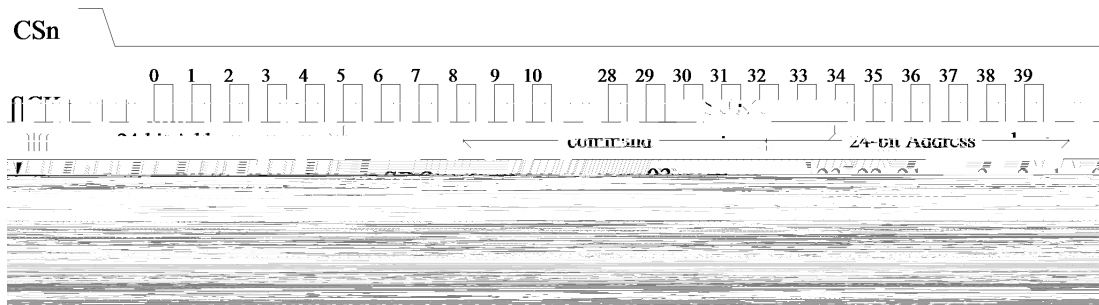
URK



4R2722 URK
URK KQ URK Hncuj
ogoqt{ ogoqt{ DQQV
URK Hncuj
URK



503 URK

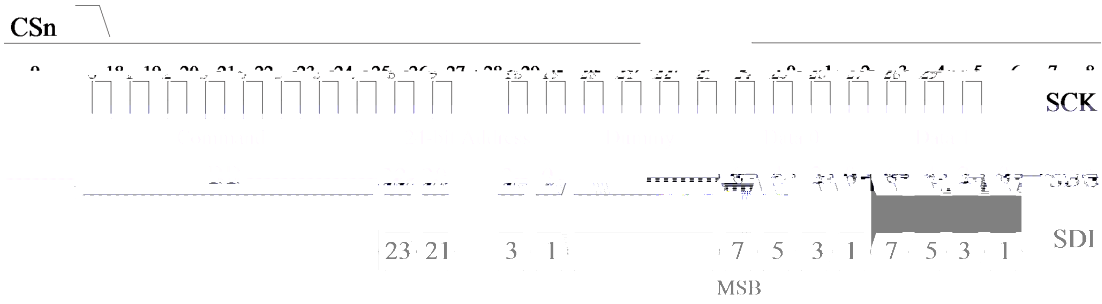


504 URK Hncuj





505 URK Hncuj



506 URK Hncuj KIQ

3.6 UART

4R2722 : WCTV 3 *WCTV2+ 3

*WCTV4WCT V



3.7 I²C

4R2722 K4E
K4E UFC UEN
622mdru

3.8 PRINTER

4R2722 LDKI :7 :

3.9 SCANNER

4R2722 TID ugi o g p v
E K U C H G

3.10 DA

4R2722 FC 6 : FC

3.11 SDIO

4R2722 UFKQlgOOE UFlgOOE Ogoqt{ UFKQ
UFKQ2 UFlgOOE Ogoqt{
UFKQ

*734M D{vg

+



3.12 PMIO

4R2722 KQ Rtqitc o ocdng Ownvkhwpvkqp KQ
ROKQ ROKQ
ROKQ ROKQ Vkogt RYO Igpgtcvqt
IRKQ

3.13 PWM

4R2722 62 1 RYO
RYO RYO
54

3.14 GPIO

4R2722 35; IRKQ
IRKQ

3.15 HPET

4R2722 54 3
4



3.16 RTC

TVE
TVE 54098: MJ \ TVE 32
203

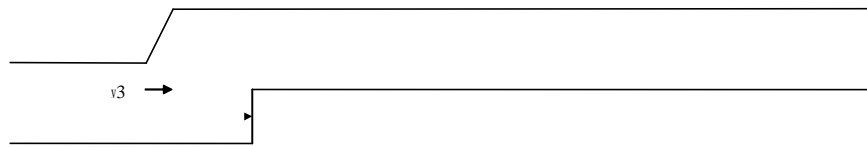
3.17

4R2722
* QVI +
F {p c o k e R q y g t O c p c i g o g p v F R O
P Q F G E Q T G - U E C E J G F F T K O C I G U E C P U [U
F {p c o k e H t g s w g p e { U e c n k p i F H U F H U
NC354



4

4.1



XFfa3X3aWUD	WUD xr	xrvz	/20
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5.3 DDR3

70503

7/6

Symbol	Parameter	Min.	Typ.	Max.	Unit
XFF	Uwr rn{ Xqncig	3064	307	307:	X
XFFS	Uwr rn{ Xqncig hqt Qwrvv	3064	307	307:	X

70504

7050403

7/7

Symbol	Parameter	DDR3-800/1066/1333/1600		Unit
		Min	Max	
XKJ0 j2e 5				



705 ce/uykpi ce/ngxgn vFXC

7/9

Symbol	Parameter	DDR3-800.1066		Unit
		Min	Max	
X _{KJ fkh}	Fkhhtgtpvkn kprwv jki j	- 20422	pqvg 5	X
X _{KN fkh}	Fkhhtgtpvkn kprwv nqike nqy	Pqvg 5	/ 20422	X
X _{KJ fkh*ce+}	Fkhhtgtpvkn kprwv jki j ce	4 z *X _{KJ} *ce+ / Xtgh+	Pqvg 5	X
X _{KN fkh*ce+}	Fkhhtgtpvkn kprwv nqy ce	pqvg 5	4 z *X _{KN} *ce+ / Xtgh+	X

7050405

EM EM FSU FSU 7/ :

XKZ

XFF XUU





XQN CE XQJ CE

7/33 706

7/33

Description	Measured		Defined by
	from	to	
Ukping/gpfgf qwrww ungy tcvg hqt tkupl gfig	XQN*CE+	XQJ*CE+]XQJ*CE+ /XQN*CE+_1



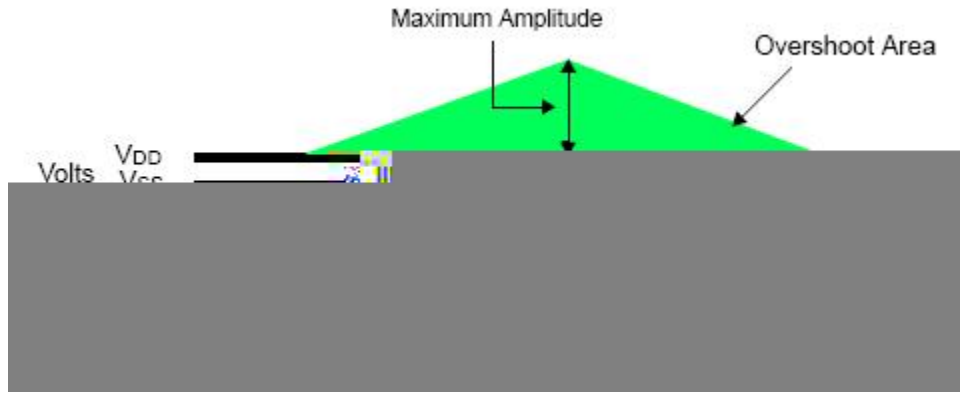
708

7/36

		DDR3-800		DDR3-1066		DDR3-1333		DDR3-1600		Units
Parameter	Symbol	Min	Max	Min	Max	Min	Max	Min	Max	
Fkhgtgpkcn Qwrrw Ungy Tcvg	UTS fkh	7	32	7	32	7	32	VDF	32	Xlpu

7050507





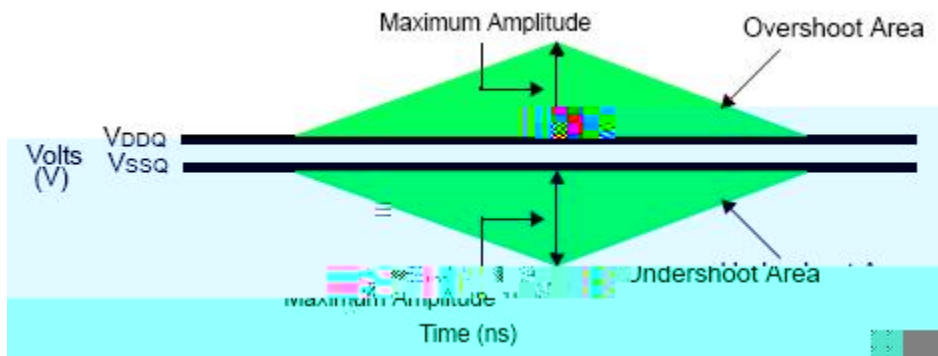
709

7/38

1

	DDR3-800	DDR3-1066	DDR3-1333	DDR3-1600	Units
Oczk owo rgcm co rnkvwfg cnnqygf hqt qxgtujqqv ctgc0	206	206	206	206	X
Oczk owo rgcm co rnkvwfg cnnqygf hqt wfgtjqqv ctgc0	206	206	206	206	X
Oczk owo qxgtujqqv ctgc cdqxc XFFS	2047	203;	2037	2035	X/pu
Oczk owo wfgtjqqv ctgc dgnqy XUUS	2047	203;	2037	2035	X/pu

*EM. EM%. FS. FSU. FSU%. FO+



70:

7050508 QFV

7/39 QFV

Symbol	Begin Point Definition	End Point Definition	Figure
vCQP	Tkukpi gfig qh EM /EM% fghkpgf d{ vjg gpf rdkpv qh QFVNqp	Gzvtcrqncvfg rdkpv cv XUUS	Hkiwtg 325
vCQPRF	Tkukpi gfig qh EM /EM% ykvj QFV dgkpi hktuv tgikuvgtgf jki j	Gzvtcrqncvfg rdkpv cv XUUS	Hkiwtg 326
vCQH	Tkukpi gfig qh EM /EM% fghkpgf d{ vjg gpf rdkpv qh QFVNqhh	Gpf rdkpv< Gzvtcrqncvfg rdkpv cv XTVVaPqo	Hkiwtg 327
vCQHRF	Tkukpi gfig qh EM /EM% ykvj QFV dgkpi hktuv tgikuvgtgf nqy	Gpf rdkpv< Gzvtcrqncvfg rdkpv cv XTVVaPqo	Hkiwtg 328
vCFE	Tkukpi gfig qh EM /EM% fghkpgf d{ vjg gpf rdkpv qh QFVNep. QFVNep6 qt QFVNep:	Gpf rdkpv< Gzvtcrqncvfg rdkpv cv XTVVaYt cpf XTVVaPqo t gurgevixgn{	Hkiwtg 329

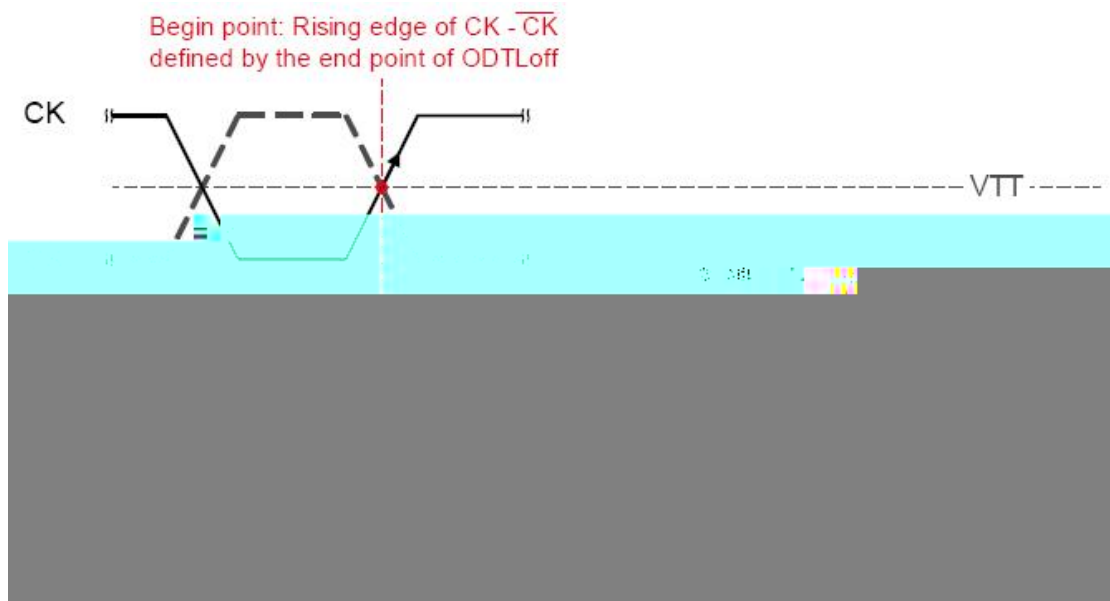


7/3: QFV

Measured Parameter	RTT_Nom Setting	RTT_Wr Setting	VSW1[V]	VSW2[V]
√CQP	T \ S16	PC	2027	2032
	T \ S134	PC	2032	2042
√CQPRF	T \ S16	PC	2027	2032
	T \ S134	PC	2032	2042
√CQH	T \ S16	PC	2027	2032
	T \ S134	PC	2032	2042
√CQHRF	T \ S16	PC	2027	2032
	T \ S134	PC	2032	2042
√CF	T \ S134	T \ S14	2042	2052



7032 vCQPRF

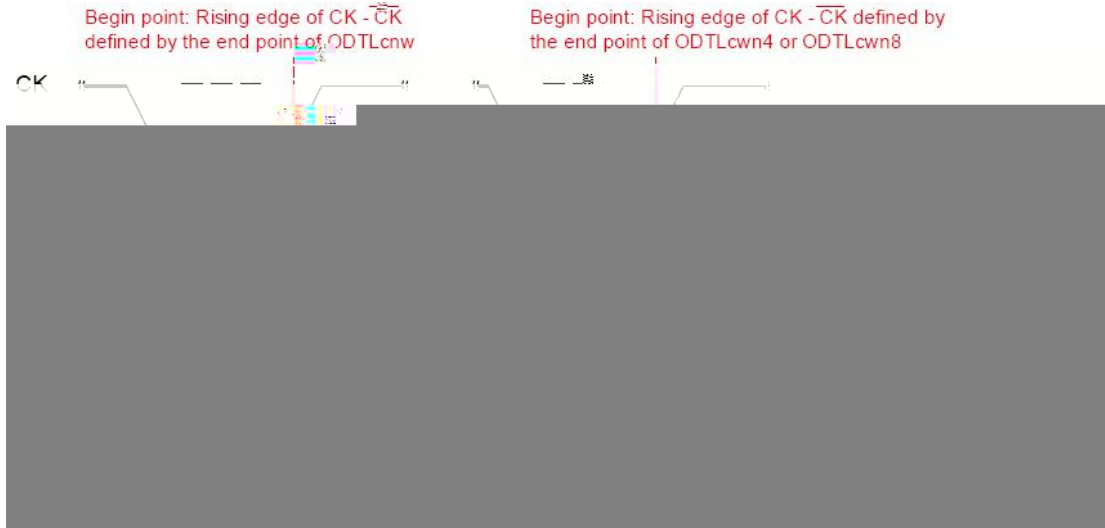


7033 vCQH



7034 vCQHRF





7035 vCFE

70506 **IDD** **IDDQ**

Symbol	7/3; KFF KFFS												Unit							
	DDR3-800			DDR3-1066			DDR3-1333			DDR3-1600										
	5-5	5-6	6-6	6-6	6-7	7-7	8-8	8-7	7-7	8-8	8-9	9-9	10-10	10-8	8-8	9-9	10-10	10-11	11-11	
vEM	407		30	97			307						3047							pu
EN	7	8	8	9	:	9	:	:	32	:	:	32	33							pEM
pTEF	7	8	8	9	:	9	:	:	32	:	:	32	33							pEM
pTE	42	43	48	49	4:	53	54	55	56	58	59	5:	5;							pEM
pTCU	37		42				46			4:										p?B



70507 /

Parameter	Symbol	7/42		1		DDR3-800		DDR3-1066		DDR3-1333		DDR3-1600		Units	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max				
κprwvlqwrww ecrcekcvcpeg *FS.	ExQ	307	502	307	409	307	407	307	407	307	407	307	407		
FO.FSU.FSU%															
VFSU.VFSU%+															





7/47 FFT5/3822 Uggf Dkpu cpf Qrgtcvki Eqpfkvkqpu

SpeedBin

DDR3-1600G
(optional)

DDR3-1600H

DDR3-1600J

DDR3-1600K



7050: DDR3

7/48 Vkokpi Rctc ovgtu d{ Urggf Dkp

Parameter	Symbol	DDR3-800		DDR3-1066		DDR3-1333		DDR3-1600		Units
		Min	Max	Min	Max	Min	Max	Min	Max	
Clock Timing										
Okpkowo Enqem E{eng Vkog *FNN qhh oqfg+	vEM*FNNaQHH+	:	/	:	/	:	/	:	/	pu
Cxgtcig Enqem Rgtkqf	vEM*cx i+									ru
Cxgtcig jki j rwnug ykfvj	vE J*cx i+	2069	2075	2069	2075	2069	2075	2069	2075	vEM*cx i+
Cxgtcig nqy rwnug ykfvj	vEN*cx i+	2069	2075	2069	2075	2069	2075	2069	2075	vEM*cx i+
Cduqnvwg Enqem Rgtkqf	vEM*cdu+	vEM*cx i+ okp - vLKV*rgt+o kp	vEM*cx i+ ocz - vLKV*rgt+ ocz	vEM*cx i+ okp - vLKV*rgt+o kp	vEM*cx i+ +ocz - vLKV*rgt+ ocz	vEM*cx i+ okp - vLKV*rgt+ okp	vEM*cx i+ +ocz - vLKV*rgt+ ocz	vEM*cx i+ okp - vLKV*rgt+ okp	vEM*cx i+ +ocz - vLKV*rgt+ ocz	



Ew o wncixg gttqt
cetquu 32 e{engu vGTT*32rgt+ /479 479



Oqfg Tgikuygt
Ugv eqo ocpf
wrfcyg fgnc{



Rqygt/wr cpf TGUGV ecnkdtcvkqp vk og	v \ Skpkv	ocz*734p EM.862pu+	/	ocz*734p EM.862pu+	/	ocz*734 pEM.862 pu+	/	ocz*734 pEM.862 pu+	/	
Pqt ocn qrgtcvkqp Hwmn ecnkdtcvkqp vk og	v \ Sqrgt	ocz*478p EM.542pu+	/	ocz*478p EM.542pu+	/	ocz*478 pEM.542 pu+	/	ocz*478 pEM.542 pu+	/	
Pqt ocn qrgtcvkqp Ujqtv ecnkdtcvkqp vk og	v \ SEU	ocz*86pE M. : 2pu+	/	ocz*86pE M. : 2pu+	/	ocz*86p EM. : 2pu +	/	ocz*86p EM. : 2pu +	/	
Reset Timing										
Gzkv Tgugv htq o EMG JKI J vq c xcnkf eq o ocpf	vZRT	ocz*7pEM .vTHE*okp +- 32pu+	/	ocz*7pEM .vTHE*okp +- 32pu+	/	ocz*7p EM.vTH E*okp+- 32pu+	/	ocz*7p EM.vTH E*okp+- 32pu+	/	
Self Refresh Timings										
Gzkv Ugnh Tghtgij vq eq o ocpfu pqv tgswtkpi c nqemgf FNN	vZU	ocz*7pEM .vTHE*okp - 32pu+	/	ocz*7pEM .vTHE*okp - 32pu+	/	ocz*7p EM. vTHE*ok p+ - 32pu+	/	ocz*7p EM. vTHE*ok p+ - 32pu+	/	
Gzkv Ugnh Tghtgij vq eq o ocpfu tgswtkpi c nqemgf FNN	vZUFNN	vFNNM*ok p+	/	vFNNM*ok p+	/	vFNNM* okp+	/	vFNNM* okp+	/	pEM
Okpko wo EMG nqy ykfvj hqt Ugnh Tghtgij gpvt{ vq gzkv vk okpi	vEMGUT	vEMG*okp + - 3 pEM	/	vEMG*okp + - 3 pEM	/	vEMG*ok p+ - 3 pEM	/	vEMG*ok p+ - 3 pEM	/	
Xcnkf Enqem Tgswktg o gpv chvgt Ugnh Tghtgij Gpvt{ *UTG+ qt Rqygt/ Fqyp Gpvt{ *RFG+	vEMUTG	ocz*7pEM .32pu+	/	ocz*7pEM .32pu+	/	ocz*7p EM.32pu +	/	ocz*7p EM.32pu +	/	
Xcnkf Enqem Tgswktg o gpv dghqtg Ugnh Tghtgij Gzkv *UTZ+ qt Rqygt/ Fqyp Gzkv *RFZ+ qt Tgugv Gzkv	vEMUTZ	ocz*7pEM .32pu+	/	ocz*7pEM .32pu+	/	ocz*7p EM.32pu +	/	ocz*7p EM.32pu +	/	
Power Down Timings										
Gzkv Rqygt Fqyp ykvj FNN qp vq cp{ xcnkf eq o ocpf= Gzkv Rtgejctig Rqygt Fqyp ykvj FNN htq gp vq eq o ocpfu pqv tgswtkpi c nqemgf FNN	vZR	ocz*5pEM .907pu+	/	ocz*5pEM .907pu+	/	ocz*5p EM.8pu+	/	ocz*5p EM.8pu+	/	
Gzkv Rtgejctig Rqygt Fqyp ykvj FNN htq gp vq eq o ocpfu tgswtkpi c nqemgf FNN	vZRFNN	ocz*32pE M.46pu+	/	ocz*32pE M.46pu+	/	ocz*32p EM.46pu +	/	ocz*32p EM.46pu +	/	



EMG okpkowo rwnug ykfvj	vEMG	ocz*5pEM 907pu+	/	ocz*5pEM .70847pu+	/	ocz*5p EM.7084 7pu+	/	ocz*5p EM.7pu+	/	
Eqo ocpf rcuu fkucdng fgnc{	vERFGF	3	/	3	/	3	/	3	/	pEM
Rqygt Fqyp Gpvt{ vq Gzkv Vkokpi	vRF	vEMG*okp +	; ,vTGHK	vEMG*okp +	; ,vTGHK	vEMG*ok p+	; ,vTGHK	vEMG*ok p+	; ,vTGHK	
Vkokpi qh CEV eqo ocpf vq Rqygt Fqyp gpvt{	vCEVRFGP	3	/	3	/	3	/	3	/	pEM
Vkokpi qh RTG qt RTGC eqo ocpf vq Rqygt Fqyp gpvt{	vRTRFGP	3	/	3	/	3	/	3	/	pEM
Vkokpi qh TFITFC eqo ocpf vq Rqygt Fqyp gpvt{	vTFRFGP	TN-6-3	/	TN-6-3	/	TN-6-3	/	TN-6-3	/	pEM
Vkokpi qh YT eqo ocpf vq Rqygt Fqyp gpvt{ *DN:QVH. DN: OTU. DE6QVH+	vYTRFGP	YN-6-*v YTlvEM*c xi++	/	YN-6-*v YTlvEM*c xi++	/	YN-6-* vYTlvE M*cxii++	/	YN-6-* vYTlvE M*cxii++	/	pEM
Vkokpi qh YTC eqo ocpf vq Rqygt Fqyp gpvt{ *DN:QVH. DN: OTU. DE6QVH+	vYTCRFGP	YN-6- Y T-3	/	YN-6- Y T-3	/	YN-6- YT-3	/	YN-6- YT-3	/	pEM
Vkokpi qh YT eqo ocpf vq Rqygt Fqyp gpvt{ *DE6OTU+	vYTRFGP	YN-4-*v YTlvEM*c xi++	/	YN-4-*v YTlvEM*c xi++	/	YN-4-* vYTlvE M*cxii++	/	YN-4-* vYTlvE M*cxii++	/	pEM
Vkokpi qh YTC eqo ocpf vq Rqygt Fqyp gpvt{ *DE6OTU+	vYTCRFGP	YN-4- Y T-3	/	YN-4- Y T-3	/	YN-4- YT-3	/	YN-4- YT-3	/	pEM
Vkokpi qh TGH eqo ocpf vq Rqygt Fqyp gpvt{	vTGHFRFGP	3	/	3	/	3	/	3	/	pEM
Vkokpi qh OTU eqo ocpf vq Rqygt Fqyp gpvt{	vOTURFGP	vOQF*ok p+	/	vOQF*ok p+	/	vOQF* okp+	/	vOQF* okp+	/	
ODT Timings										
QFV wvtp qp Ncvgpe{	QFVNqp	YN/4?EYN-CN/4								pEM
QFV wvtp qhh Ncvgpe{	QFVNqhh	YN/4?EYN-CN/4								pEM
QFV jki j vkog ykvjqwv ytkvg eqo ocpf qt ykvj ytkvg eqo ocpf cpf DE6	QFVJ6	6	/	6	/	6	/	6	/	pEM
QFV jki j vkog ykvj Ytkvg eqo ocpf cpf DN:	QFVJ :	8	/	8	/	8	/	8	/	pEM



Cu{pej tqpquw TVV vwtp/qp fgnc{ *Rqygt/ Fqyp ykvj FNN htq gp+	vCQPRF	4	:07	4	:07	4	:07	4	:07	pu
Cu{pej tqpquw TVV vwtp/qhh fgnc{ *Rqygt/ Fqyp ykvj FNN htq gp+	vCQHRF	4	:07	4	:07	4	:07	4	:07	pu
TVV vwtp/qp	vCQP	/622	622	/522	522	/472	472	/447	447	ru
TVVaPqo cpf TVVa YT vwtp/ qhh vk og htq o QFVNqhh tghgtgpeg	vCQH	205	209	205	209	205	209	205	209	vEM*cx i+
TVV f{pc oke ejcpig umgy	vCFE	205	209	205	209	205	209	205	209	vEM*cx i+
Write Leveling Timings										
Hktuv FSU FSU% tkukpi fgig chvgt y tkvg ngxgnkpi oqfg ku rtqitco ogf	vYNOTF	62	/	62	/	62	/	62	/	pEM
FSU FSU% fgnc{ chvgt y tkvg ngxgnkpi oqfg ku rtqitco ogf	vYNFSUGP	47	/	47	/	47	/	47	/	pEM
Y tkvg ngxgnkpi ugvwr vk og htq o tkukpi EM. EM% etquukpi vq tkukpi FSU. FSU% etquukpi	vYNU	547	/	467	/	3;7	/	387	/	ru
Y tkvg ngxgnkpi jqnf vk og htq o tkukpi FSU. FSU% etquukpi vq tkukpi EM. EM% etquukpi	vYNJ	547	/	467	/	3;7	/	387	/	ru
Y tkvg ngxgnkpi qwrwv fgnc{	vYNQ	2	;	2	;	2	;	2	907	pu
Y tkvg ngxgnkpi qwrwv gttqt	vYNQG	2	4	2	4	2	4	2	4	pu

5.4 RGMII

T I O K K

X F F a 5 X 5

5 0 5 X

70603 RGMII

7 / 4 9 T I O K K

Kqj	*XFFG/206X+	34	oC
Kqn	*206X+	34	oC





7/ 52 WUD

Parameter	Symbol	Conditions	Min.	Max.	Units
Input Levels for Low-/full-speed:					
Jki j *ftkxgp+	XXJ		4		X
Jki j *hncvki pi+	XXJ \		409	508	X
Nqy	XKN			20:	X
Fkhhgtgpkcn Kprwv Ugpuvkxkv{	XFK	.*F -+/*F/+	204		X
Fkhhgtgpkcn Eq o oqp Oqfg Tcpi g	XEO	kpenwfgu XFK tci pi g	20:	407	X
Input Levels for High-speed:					
Jki j/urggf uswgnej fgvgvkqp vjtgujqnf *fkhhgtgpkcn ukipcn c o rnkvwfg+	XJUUS		322	372	o X
Jki j/urggf fkueqppgev fgvgvkqp vjtgujqnf *fkhhgtgpkcn ukipcn c o rnkvwfg+	XJUFUE		747	847	o X
Jki j/urggf fkhhgtgpkcn kprwv ukipcnkpi ngxgnu					
Jki j/urggf fevc ukipcnkpi eq o oqp oqfg xqncig tci pi g*iwkfg nkg hqt tgegxgt+	XJUEO		/72	722	o X
Output Levels for Low-/full-speed:					
Nqy	XQN		2	205	X
Jki j *Ftkxgp+	XQJ		40:	508	X
UG3	XQUG3		20:		X
Qwvrvv Ukipcn Etquuxgt Xqncig	XETU		305	4	X
Output Levels for High-speed:					
Jki j/urggf kfng ngxgn	XJUQK		/32	32	o X
Jki j/urggf fevc ukipcnkpi jki j	XJUQJ		582	662	o X
Jki j/urggf fevc ukipcnkpi nqy	XJUQN		/32	32	o X
Ej ktr L ngxgn*fkhhgtgpkcn xqncig+	XEJKTRL		922	3322	o X
Ej ktr M ngxgn*fkhhgtgpkcn xqncig+	XEJKTRM		/;22	/722	o X
Decoupling Capacitance:					
Fqypwvtgc o Hcekpi Rqtv D{rcuu Ecrcekvpeg *rgtjwd+	EJRD	XDWU vq I P F	342		H
Wrwvtgc o Hcekpi Rqtv D{rcuu Ecrcekvpeg	ETRD	XDWU vq I P F	3	32	H
Input Capacitance for Low-/full-speed:					
Fqypwvtgc o Hcekpi Rqtv	EKPF			372	rH
Wrwvtgc o Hcekpi Rqtv*ylqecdng+	EKPWD			322	rH
Vtpeuegkxgt gf ig tcvg eqpvtqn ecrcekvpeg	EGF IG			97	rH
Input Impedance for High-speed:					
VFTurgehqtjki j/urggfvtg o kpcvkqp					



Term_ e (\$





5.6 **Swash**



6

6.1

8/3

Rctc o gvt	Xc nwg
VFR Ocz Rq ygt	7 Y cvu
Tvj *L/E+	8 ÅEI Y
VI	347 ÅE

6.2

8/4

Rtqhkn g Hgcwtg		Rd/Htgg Cuug o dn{
Cxgtc ig t e o r/wr tcv g *Vuocz vq Vr+		5ÅElugeqpf o czl
Rtgjgcv	Vg o rgtcwtg Okp *Vuokp+	372 ÅE
	Vg o rgtcwtg Ocz *Vuocz+	422 ÅE
	Vkog *Vuokp vq Vuocz+ *vu+	82/3:2 ugeqpfu
Vkog o ckpvckpgf cdq xg	Vg o rgtcwtg *VN+	439 ÅE
	Vkog *vN+	82/372 ugeqpfu
Rgcm Vg o rgtcwtg *Vr+		467ÅE
Vkog ykvjlp 7ÅE qh cevwcn Rgcm Vg o rgtcwtg *vr+4		42/62 ugeqpfu
Tco r/fqyp Tcv g		8 ÅElugeqpf o czl
Vkog 47ÅE vq Rgcm Vg o rgtcwtg		: okpwgu o czl





803



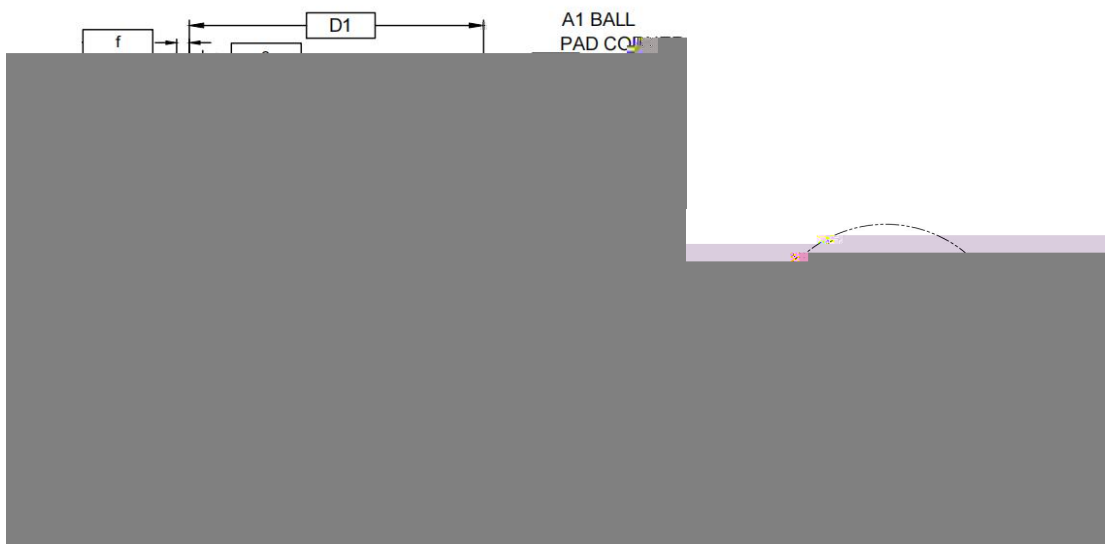
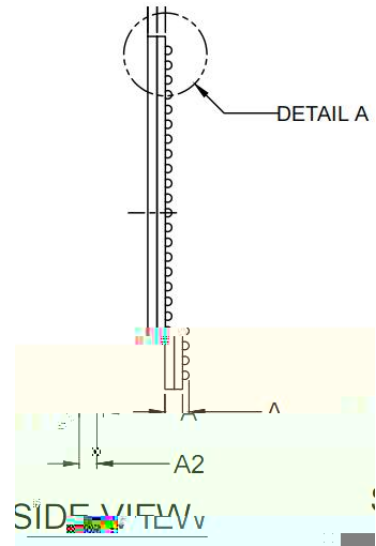




	20	21	22	23
A	FFTaFS38	FFTaFSUR4	XUU	XUU
B	FFTaFSO4	FFTaFSUP4	FFTaFS3;	XUU
C	FFTaYGP	FFTaFS39	FFTaFS43	FFTaFS45
D	>FWOO [aPGV@	FFTaFS3:	FFTaFS42	FFTaFS44
E	>FWOO [aPGV@	XUU	FFTaFS46	
F	>FWOO [aPGV@	FFTaFSO5	FFTaFS47	FFTaFS48
G	>FWOO [aPGV@	XUU	FFTaFS49	

U U X

7.2



904



9/4

PQVG<

- 30 FKOGPUKQPU CTG KP OKNNKOGVGTU0
- 40 CNN FKOGPUKQPU CPF VQNGTCPEG EQPHQTO VQ CUOG [3607O/422;0
- 50 VGTOKPCN RQUOQPU FGUK I PCVKQP RGT LGUF ;70
- 60 TGHNQ Y DCNN FKCOGVGT0
- 70 FKOGPUKQP ðdö KU OGPUWTGF CV VJG OCZKOWO UQNFGT DCNN
FKCOGVGT RCTCNNGN VQ RTKOCT [FCVWO E0
- 80 TCY UQNFGT DCNN UK\G FWTKP I CUUGODN[KU



8

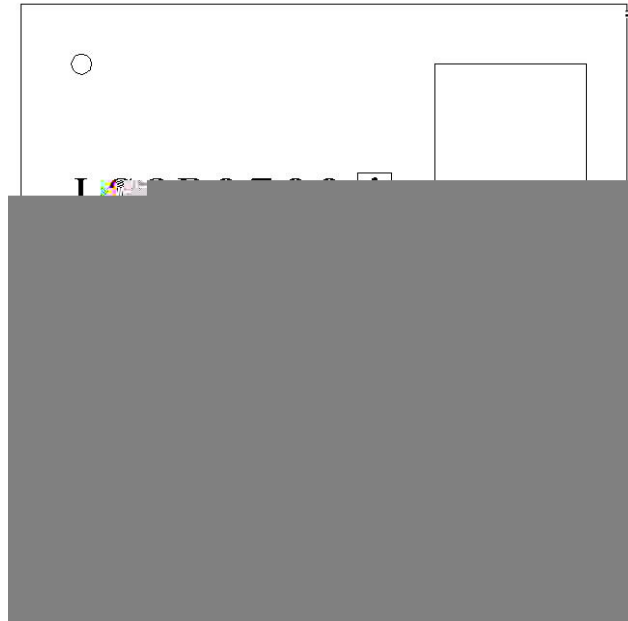
:/3

-

2



9



;03

c+

d+ NU4R2722 NU4R2722  /k

e+ EJP [[Y Y XX J

f+ XFCCCCCCCPPP

g+ NQQP IUQP^ì

h+ e