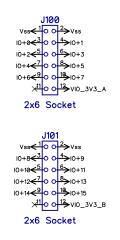
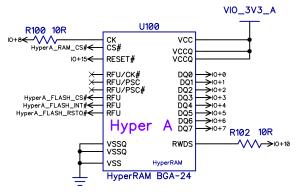
## HyperRAM and HyperFLASH

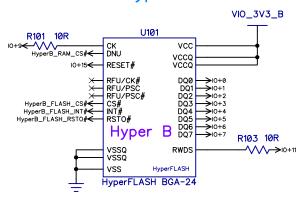
#### Edge expansion socket (Dual)



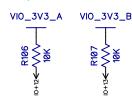
## 16MB HyperRAM



### 32MB HyperFLASH



#### Pullups / Pulldowns



### Hyper channel A/B configuration

Select RAM or FLASH for channel A

\*\*Table Hypera\_FLASH\_CS#\*\*

\*\*Parameter Plash\_CS#\*\*

\*\*Parameter Plash\_CS#\*

\*\*Parameter Plas

Select RAM or FLASH for channel B

HyperB\_RAM\_CS#

HyperB\_RAM\_CS#

HyperB\_FLASH\_CS#

Each footprint will accept HyperRAM or HyperFLASH. (One of each supplied with PN 64004-ES)

Parallax Inc. 599 Menlo Drive Rocklin, CA 95765

(916) 624-8333 http://www.parallax.com/

# P2-ES Eval HyperRAM/Flash Add-on Board

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Part Number: 64004-ES

Revision: A

Last Update: 21 Jul 2019 (MM)

## **Decoupling and Breakouts**

### Optional FLASH and DUAL memory configuration

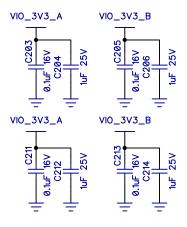
R201 Empty

HyperA\_FLASH\_RSTO#

Both RSTO can be made common

 RESET pulled down, or controlled by RESn (Default Setting: Set 10+15 HIGH to enable memory)

#### VCCQ decoupling



### Optional breakout of memory device pins





#### Mounting holes

Mounting Hole Vss MH201 BOM only - mfg

PCB201

PCB for P2 Eval HyperMemory Accessory

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## P2-ES Eval HyperRAM/Flash Add-on Board

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RefDes	Quantity	Value	Name	Manufacturer
C203, C205, C211, C213	4	0.1uF 16V	200-11203 : CAP-CER,0.1uF,X7R,16V,0402	Murata : GRM155R71C104KA88J
C204, C206, C212, C214	4	1uF 25V	213-01011 : Cap-Cer,1uF,25V,X5R,0402	Taiyo : TMK105BJ105MV-F
J100, J101	2	2x6 Socket	450-01902 : CON-SCKT,2X6,0.1*,PT,SMT	Harwin : M20-7810645R
J201	1	1x5 Header	Unpopulated	
J202	1	1x2 Header	Unpopulated	
MH201	1	Mounting Hole Vss	Unpopulated	
PCB201	1	PCB for P2 Eval HyperMemory Accessory	300-64004-ES : Raw PCB P2-ES Memory Bd	
R100, R101, R102, R103, R104, R105, R203	7	10R	150-11018 : RES,10,5%,0603	Panasonic : ERJ-3GEYJ100V
R106, R107, R204	3	10K	150-11031 : RES,10K,5%,0603	Panasonic : ERJ-3GEYJ103V
R201, R202	2	Empty	Unpopulated	
U100	1	HyperRAM BGA-24	602-10034 : 16MB/128Mb HyperRAM BGA-24	ISSI : IS66WVH16M8BLL-100B1LI
U101	1	HyperFLASH BGA-24	602-10035 : 32MB/256Mb HyperFLASH BGA-24	ISSI: IS26KL256S-DABLI00
	28			

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