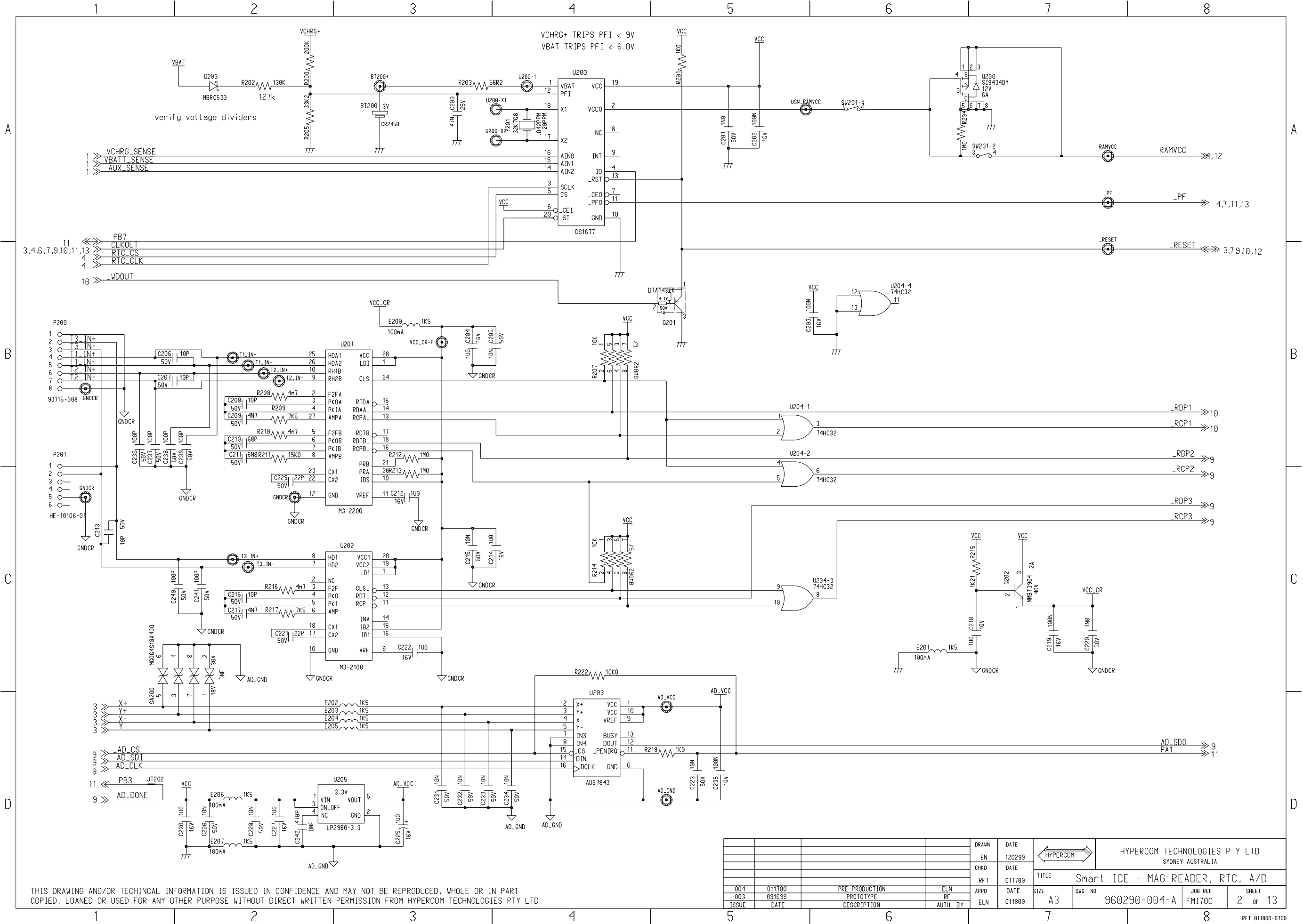




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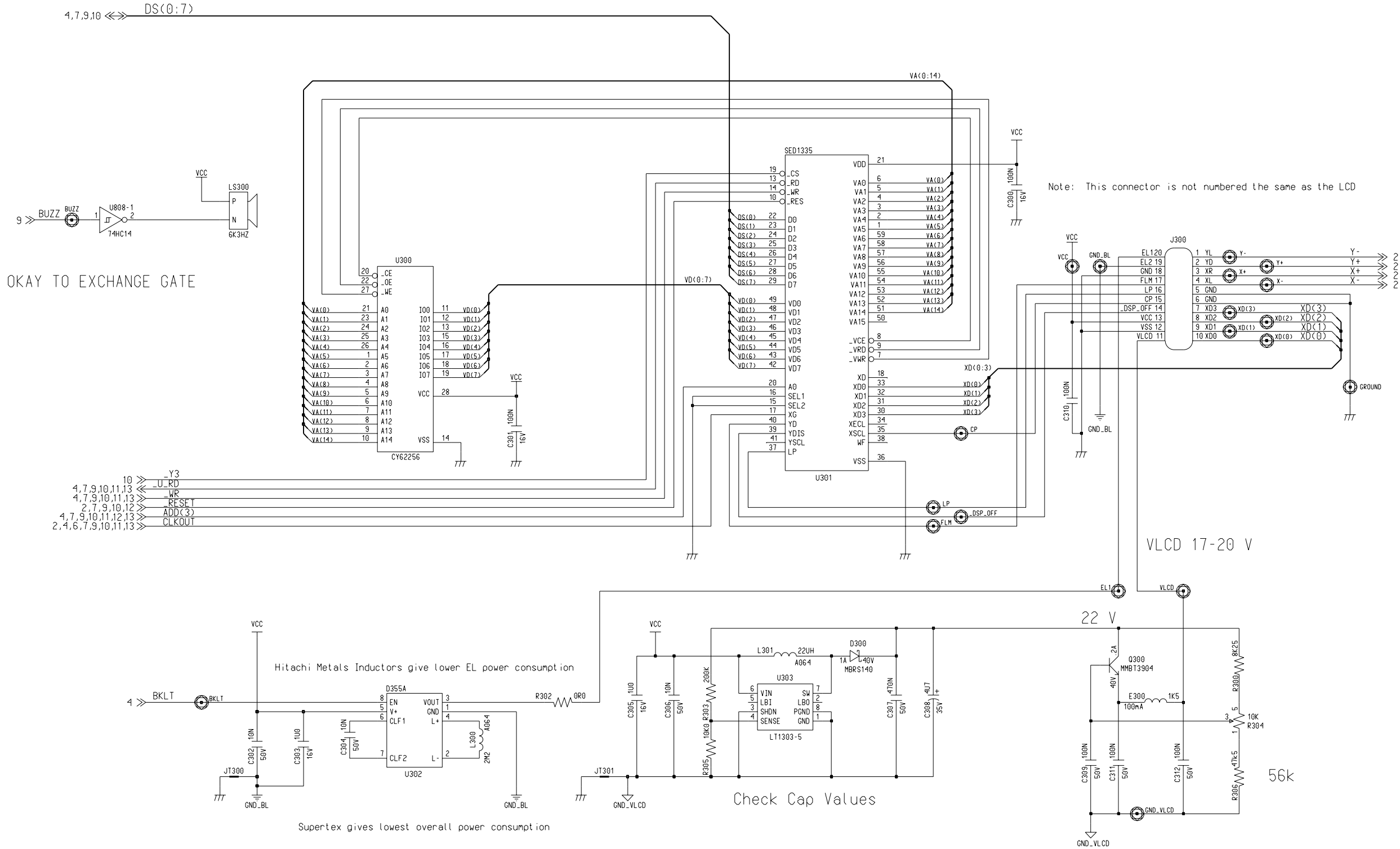
* VCC Connects to U1200 Power Through Diode D1200

T 011800-0715



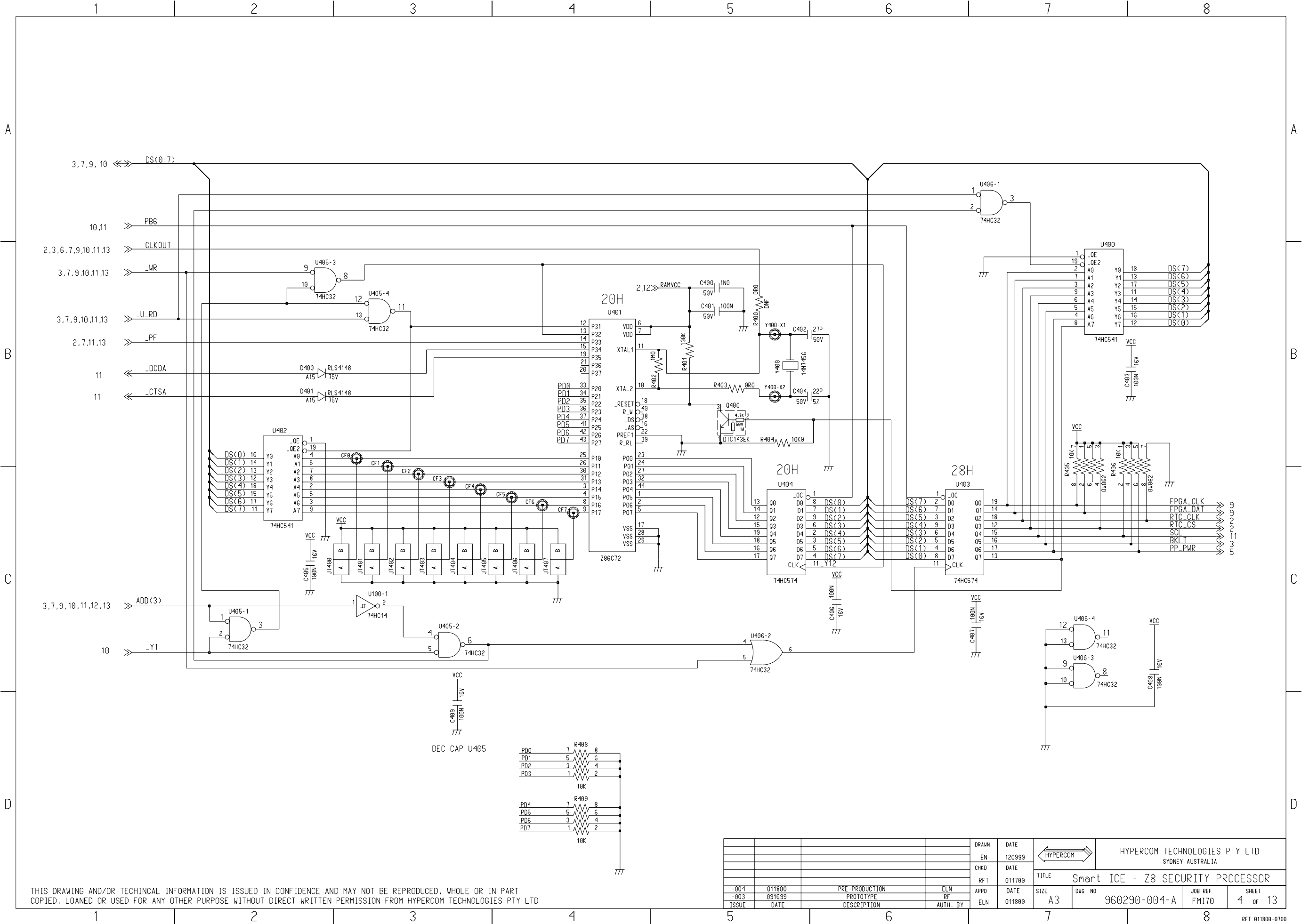
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				DRAWN	DATE	HYPERCOM		HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA		
				EN	120299					
				CHKD	DATE					
				RFT	011700	TITLE		Smart ICE - MAG Reader, RTC, A/D		
-004	011700	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET	
-003	091639	PROTOTYPE	RF	ELN	011800	A3	960290-004-A	FMI70C	2 of 13	
ISSUE	DATE	DESCRIPTION	AUTH. BY							



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				DRAWN	DATE	HYPERCOM		HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA		
				EN	120999					
				CHKD	DATE					
				RFT	011700	TITLE		Smart ICE - LCD CONTROLLER/EL BKLIGHT/+24V PS		
-004	011800	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET	
-003	091699	PROTOTYPE	RF	ELN	011800	A3	960290-004-A	FM170	3	of 13
ISSUE	DATE	DESCRIPTION	AUTH. BY							



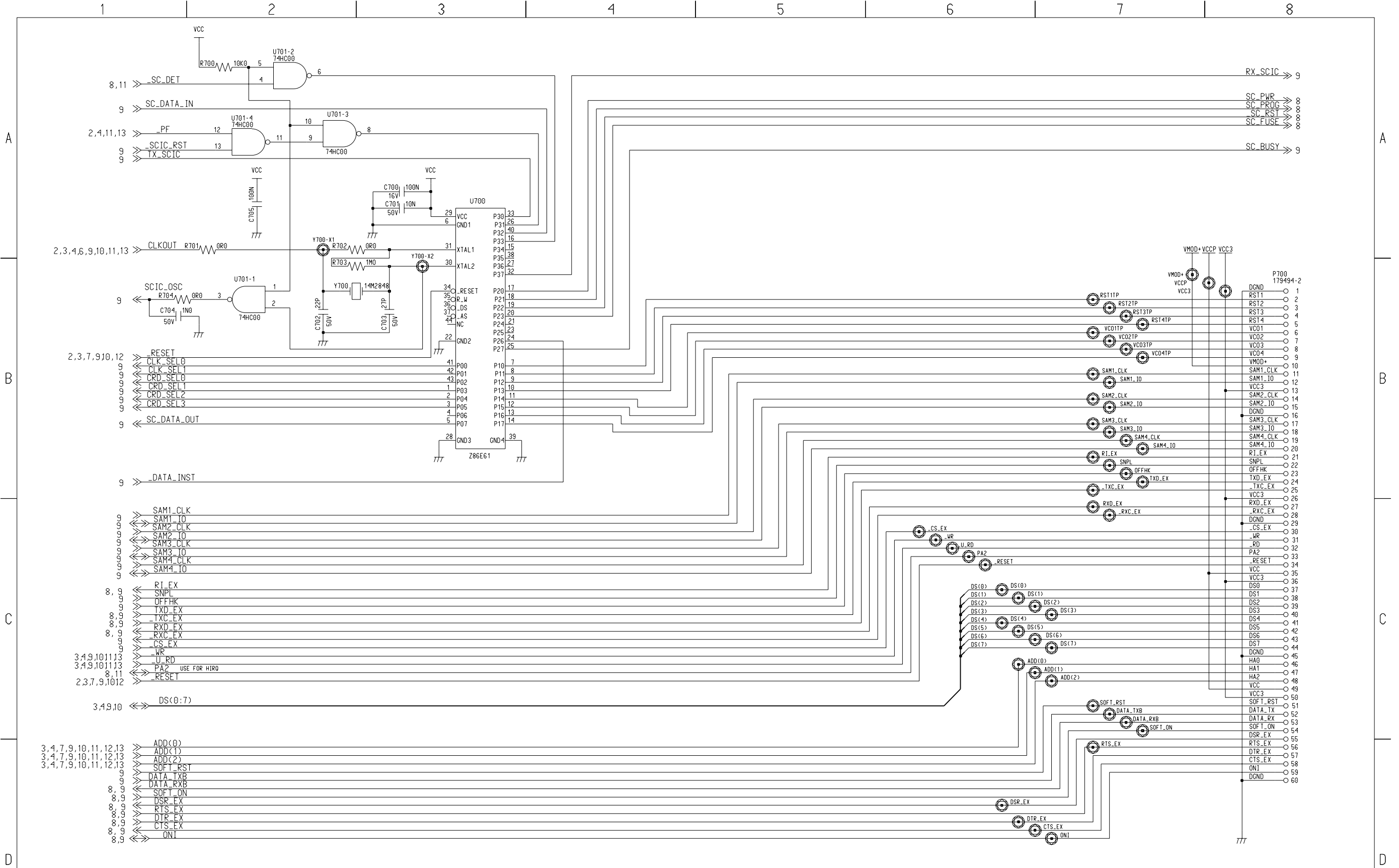
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				DRAWN	DATE			HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA				
				EN	120999							
				CHKD	DATE	TITLE Smart ICE - Z8 SECURITY PROCESSOR						
				RFT	011700							
-004	011800	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET			
-003	091699	PROTOTYPE	RF	ELN	011800	A3	960290-004-A	FMI70	4 OF 13			
ISSUE	DATE	DESCRIPTION	AUTH. BY									



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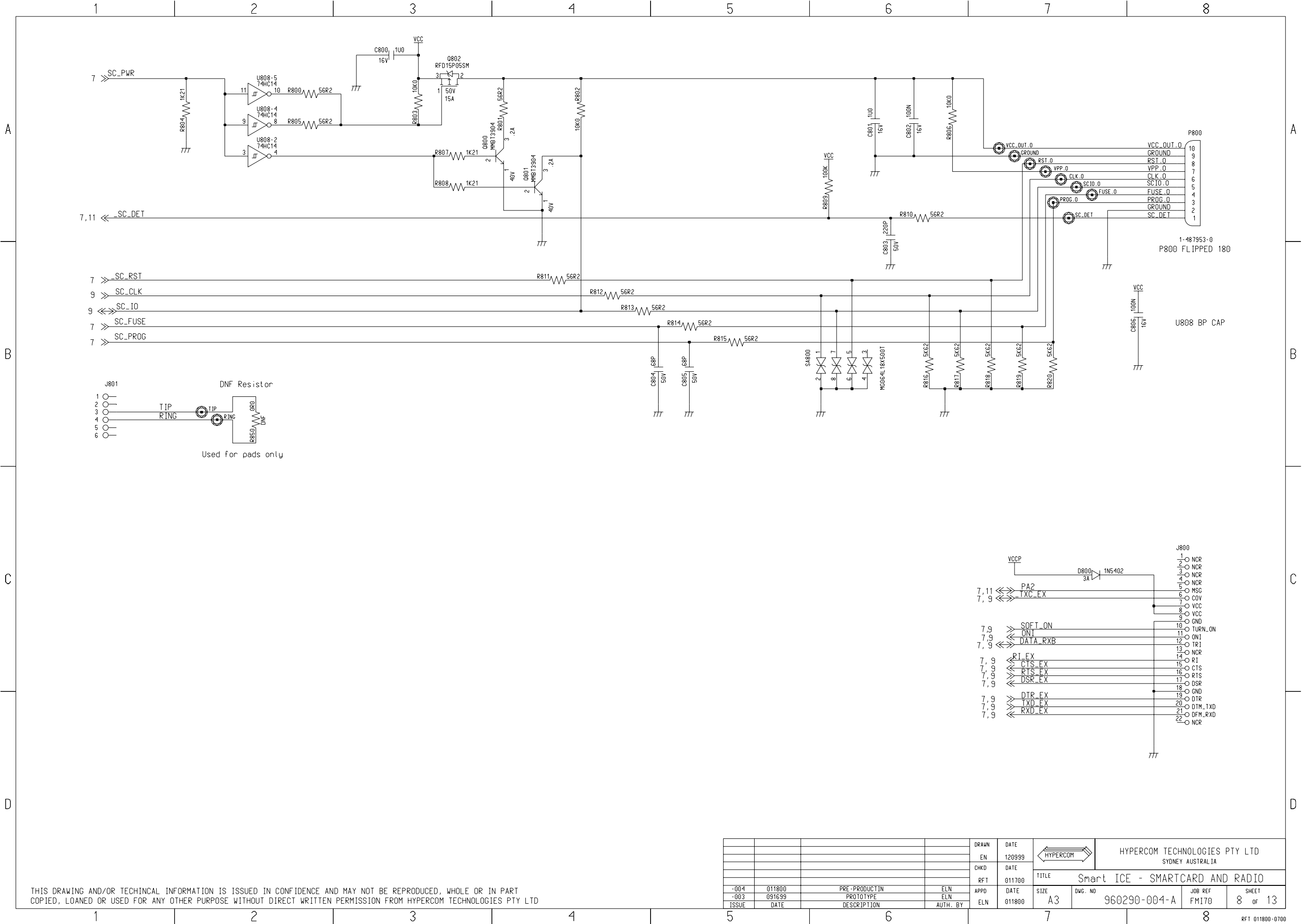
T 011800-0700



Z8 CODE MUST BE CHANGED TO SUPPORT 4th SAM AND INVERTED POWER CONTROL

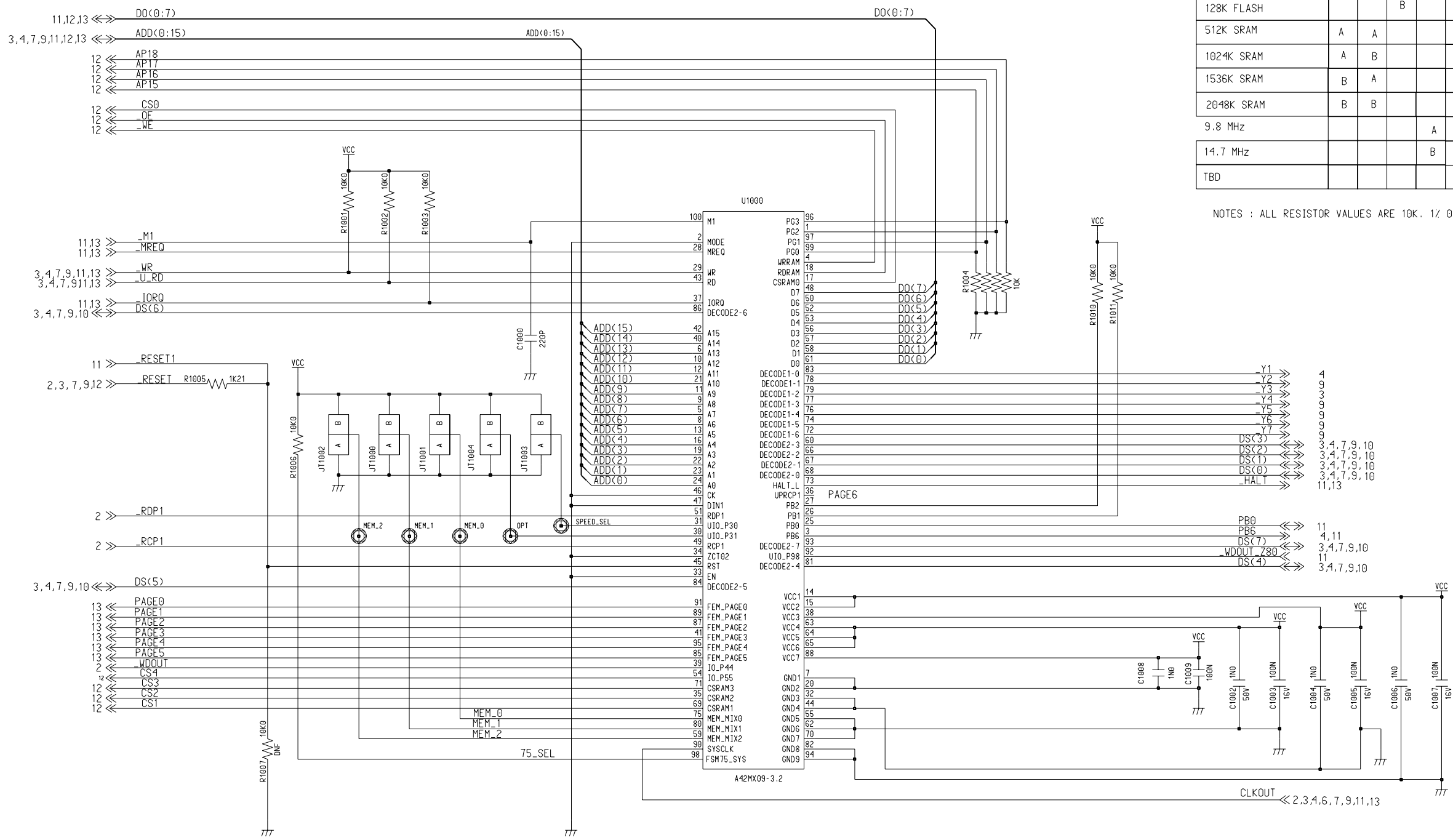
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				DRAWN	DATE		HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA			
				EN	120999					
				CHKD	DATE	TITLE	Smart ICE - FOUR SAMs			
				RFT	011700					
-004	011800	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET	
-003	091699	PROTOTYPE	RF	ELN	011800	A3	960290-004-A	FM170	7 of 13	
ISSUE	DATE	DESCRIPTION	AUTH. BY							



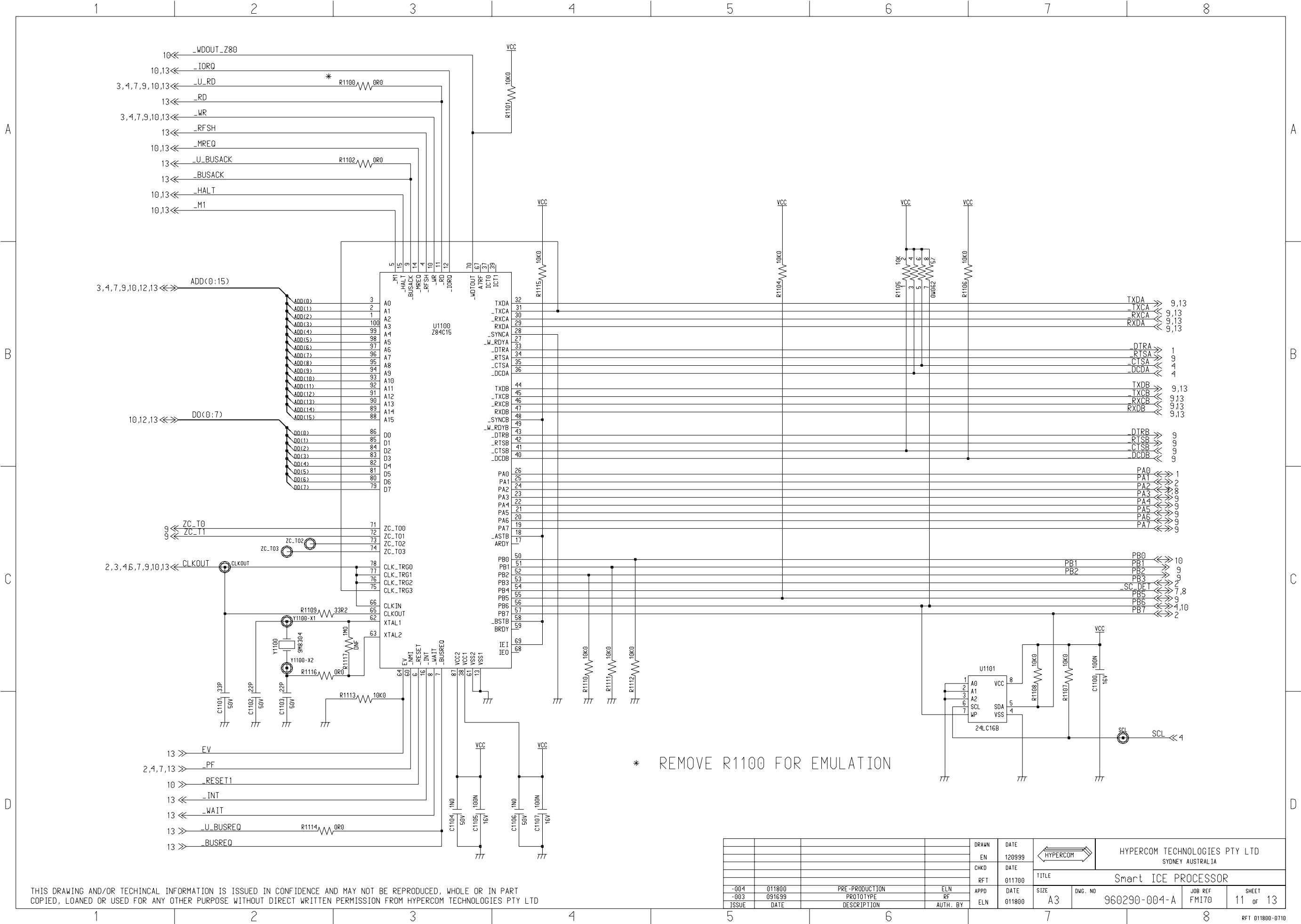
OPTION	JT 1000	JT 1001	JT 1002	JT 1003	JT 1004
NO FLASH			A		
128K FLASH			B		
512K SRAM	A	A			
1024K SRAM	A	B			
1536K SRAM	B	A			
2048K SRAM	B	B			
9.8 MHz				A	
14.7 MHz				B	
TBD					A

NOTES : ALL RESISTOR VALUES ARE 10K. 1/ 0603



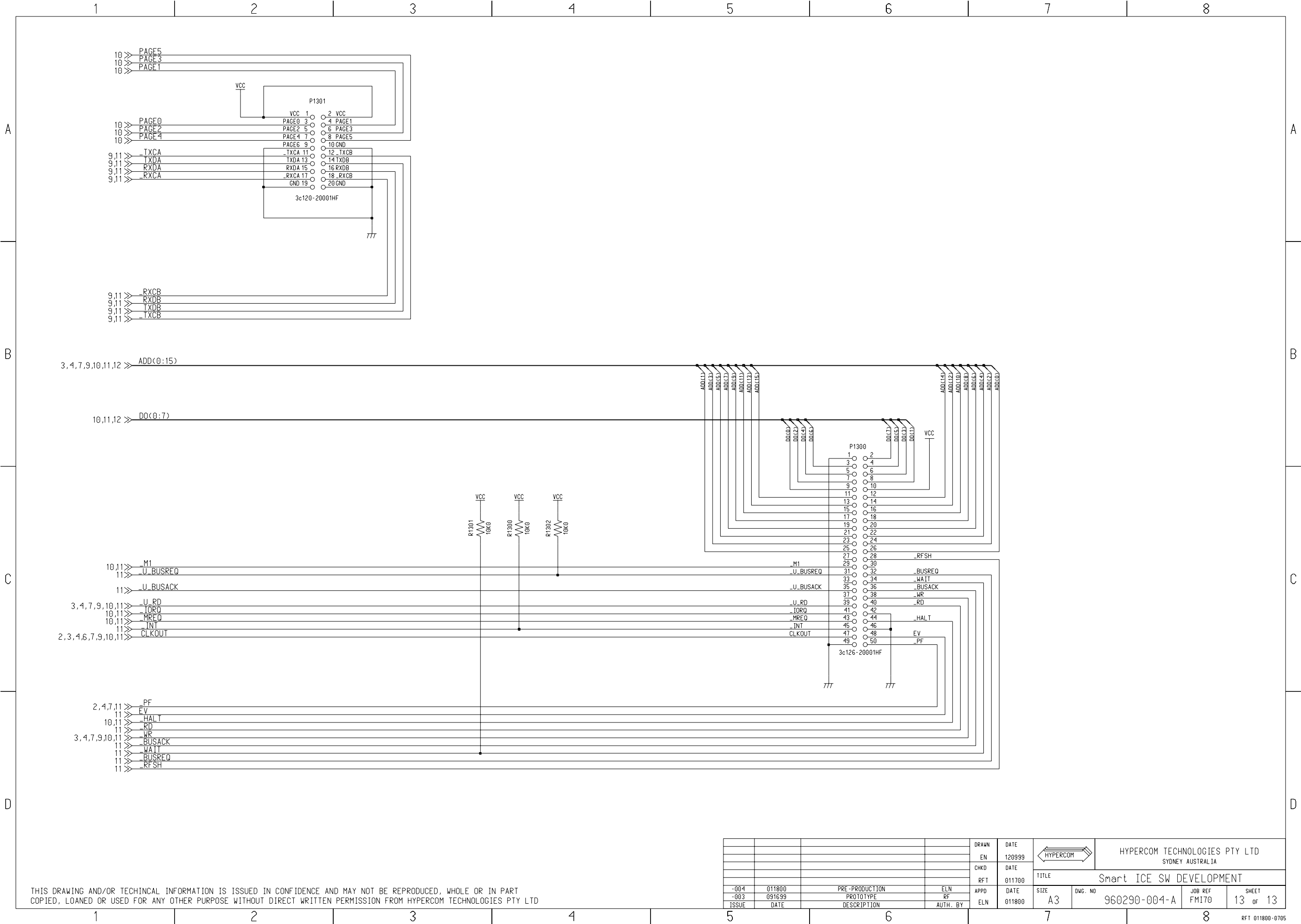
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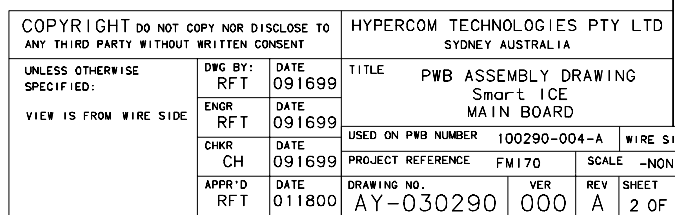
				DRAWN	DATE			HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA		
				EN	120999					
				CHKD	DATE	TITLE		Smart ICE - Actel FPGA		
				RFT	011700					
-004	011800	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET	
-003	120899	PROTOTYPE	ELN	ELN	011800	A3	960290-004-A	FM170	10 OF 13	
ISSUE	DATE	DESCRIPTION	AUTH. BY							

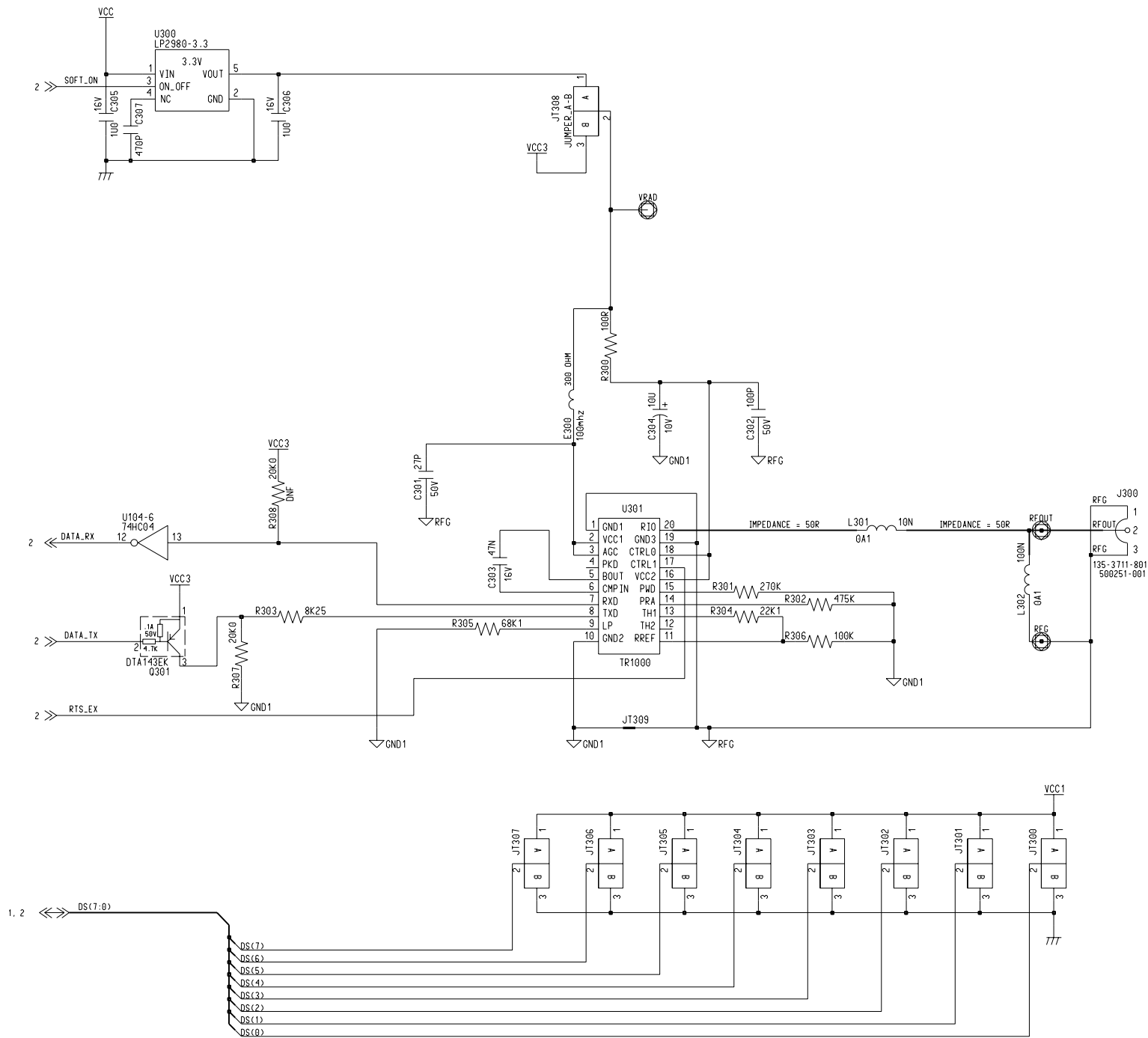


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				DRAWN	DATE	HYPERCOM		HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA			
				EN	120999						
				CHKD	DATE						
				RFT	011700			Smart ICE PROCESSOR			
-004	011800	PRE-PRODUCTION	ELN	APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET		
-003	091699	PROTOTYPE	RF	ELN	011800	A3	960290-004-A	FMI70	11	OF	13
ISSUE	DATE	DESCRIPTION	AUTH. BY								



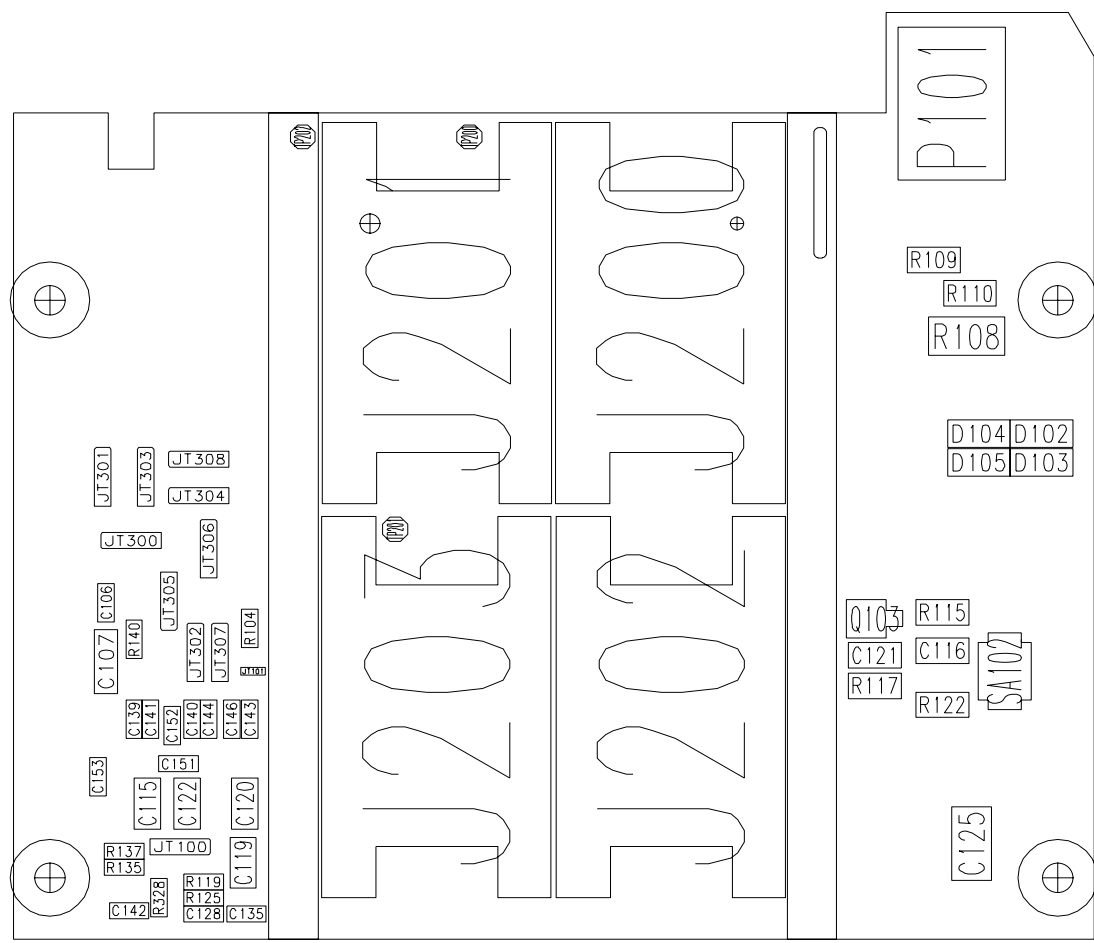




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				RFT	990723						
				CHKD	DATE						
				RF/SP	123099			TITLE SMART ICE 900MHZ			
-003	112999	PRE -PRODUCTION		APPD	DATE	SIZE	DWG. NO	JOB REF	SHEET		
-002	112999	PRE -PRODUCTION		-	-	A3		FMT70	3	OF 3	
-001	081299	PROTOTYPE		TBA	-						
ISSUE	DATE	DESCRIPTION		AUTH. BY	-						

NOTES:

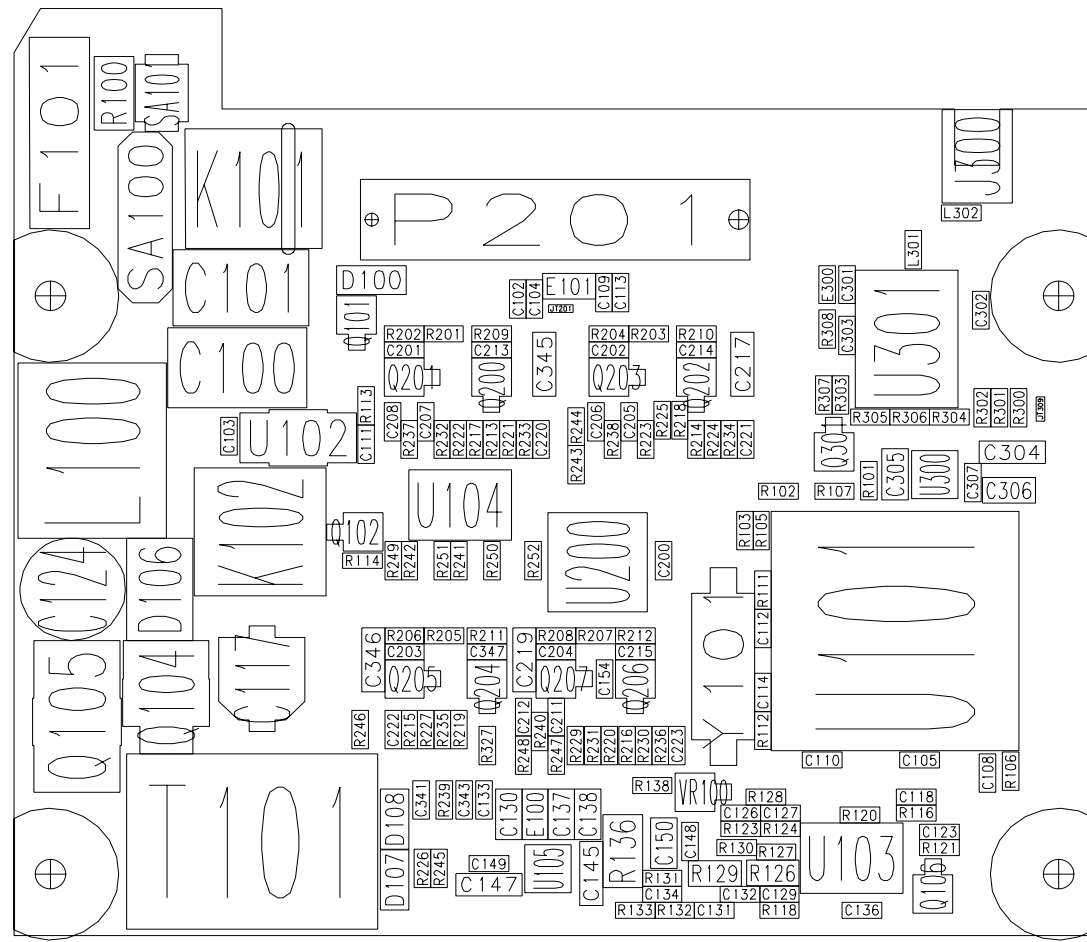
REVISION					
REV	DATE	ECO	JREF	COMMENTS	CHKD APPD
A	120799	-	-	PROTOTYPE	CH EN



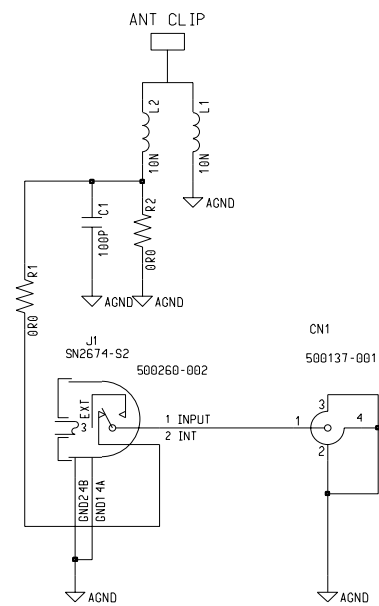
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UNLESS OTHERWISE SPECIFIED: VIEW IS FROM COMP SIDE	ENG BY:	JJK	DATE	083199	TITLE PWB ASSEMBLY DRAWING MINI ICE		
	ENGW	RF	DATE	083199			
	CHKR	CH	DATE	083199	USED ON PWB NUMBER	100342-003-A	COMP SIDE
	APPR'D	DATE	083199	PROJECT REFERENCE	FMT70	SCALE	-NONE-
DRAWING NO.					AY-030342	VER	000
REV					A	REV SHEET	1 OF 2

NOTES:

REVISION					
REV	DATE	ECO	JREF	COMMENTS	CHKD APPD
A	120799	-	-	PROTOTYPE	CH EN

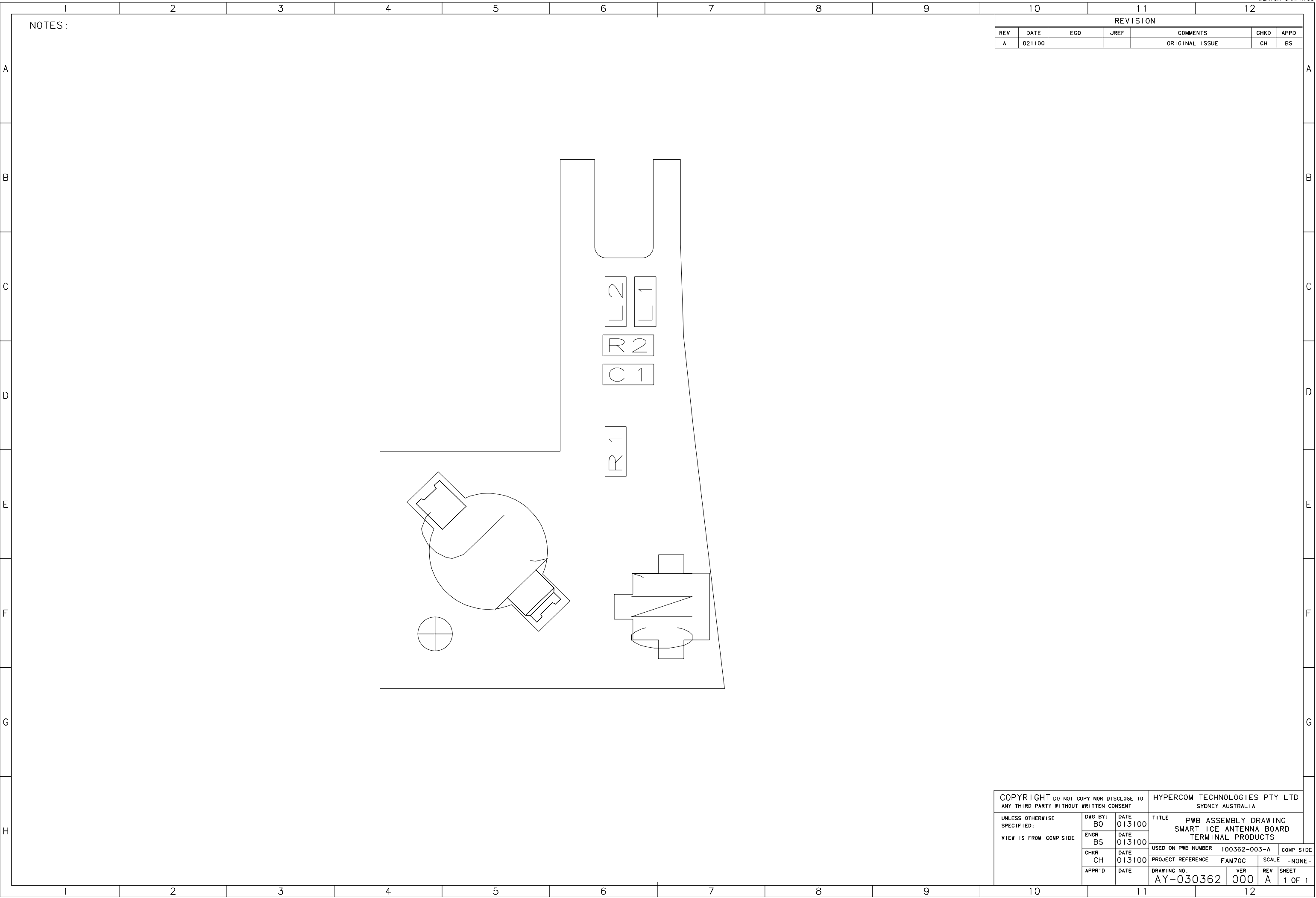


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UNLESS OTHERWISE SPECIFIED: VIEW IS FROM WIRE SIDE	DWG BY: JJK	DATE 08.3.199	TITLE PWB ASSEMBLY DRAWING MINI ICE				
	ENGR RF	DATE 08.3.199					
	CHKD CH	DATE 08.3.199	USED ON PWB NUMBER 100342-003-A		WIRE SIDE		
			PROJECT REFERENCE FMT 70		SCALE -NONE-		
	APPR'D	DATE	DRAWING NO. AY-030342		VER 000	REV SHEET A 2 OF 2	



				DRAWN	DATE			HYPERCOM TECHNOLOGIES PTY LTD SYDNEY AUSTRALIA		
				BO	1/26/00					
				CHKD	DATE					
				BS	1/26/00	TITLE		SMART ICE ANTENNA BOARD		
-001	01/26/00	ORIGINAL ISSUE	BS	APPD	DATE	SIZE	DWG NO	JOB REF	SHEET	
ISSUE	DATE	DESCRIPTION	AUTH. BY	-	-	A3	960362-003-A	FAM70C	1 OF 1	

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NOTES:

REVISION						
REV	DATE	ECO	JREF	COMMENTS		CHKD APPD
A	021100			ORIGINAL ISSUE		CH BS

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UNLESS OTHERWISE SPECIFIED: VIEW IS FROM COMP SIDE	DWG BY: BO	DATE 013100	TITLE PWB ASSEMBLY DRAWING SMART ICE ANTENNA BOARD TERMINAL PRODUCTS				
	ENGR BS	DATE 013100					
	CHKR CH	DATE 013100	USED ON PWB NUMBER		100362-003-A	COMP S	
	APPR'D	DATE	PROJECT REFERENCE		FAM70C	SCALE	-NONE-
			DRAWING NO.		VER	REV	SHEET
			AY-030362		000	A	1 OF