

AEG ID

INTELLIGENTIFICATION™

Parts list:	999.345.ST
Product:	ARE i2.0 HF
Board:	ARE 041 V226
Revision:	006
Date of change:	27.05.2024
Author:	Waitzinger

Boards	
Layers:	4
Material:	FR4
Thickness:	1.6/35u Cu

Marking type:
Roll label
Marking text:
ARE 041, Serial/Chargennummer 5-digits / Seriennummer 5-digit
RoHS labeling

Temperature range/components tolerance	
Unless otherwise specified, a temperature range of -40°C to +85°C applies to all components.	
For passive components of the E-Series (R/C/L) without tolerance specifications, a tolerance of +/-5% generally applies.	
The following dielectrics applies to capacitors without detailed specification:	
0402 to 1nF	NP0
0402 1,5nF to 100nF	X7R
0402 from 220nF	X5R
0603 to 1,5nF	NP0
0603 2,2nF to 2,2uF	X7R
0603 from 3,3uF	X5R
0805 to 1,5nF	NP0
0805 2,2nF to 10uF	X7R
0805 from 10uF	X5R
1206 to 2,2uF	NP0
1206 from 3,3uF	X7R

Nr.	Part	Value	Tolerance +/-	Package	Nr of pieces	Place	Description	Manufacturer	Ordering name	Comment
1	C108	4,7u	10%	1206	1	1	Capacitor, min. 16V, X5R			
	C100, C101, C102, C103, C111, C200, C208, C211, C301, C303, C304, C402	100n	10%	0402	12	1	Capacitor, min. 16V			
2	C109, C116, C201, C203, C305, C309, C400, C401	1u	10%	0402	8	1	Capacitor, min. 10V			
3	C112, C113	18p	5%	0402	2	1	Capacitor, min. 16V			
4	C205	100u	10%	1206/A	1	0	Tantal 10V			
5	C206, C210	2,2u	10%	0402	2	1	Capacitor, min. 10V			
6	C207	100u	10%	2312/C	1	1	Tantal 10V			
7	C300	100u	10%	1210/B	1	1	Tantal 10V			
8	C302	6,8u	10%	0603	1	1	Capacitor, min. 10V			
9	C306, C322	470n	10%	0402	2	1	Capacitor, min. 10V			
10	C310	270p	1%	0402	1	1	Capacitor, min. 10V, COG/NP0			
11	C315	180p	1%	0402	1	1	Capacitor, min. 10V, COG/NP0			
12	C323, C324	12p	5%	0402	2	1	Capacitor, min. 10V			
13	C326, C327	1n	5%	0402	2	1	Capacitor, min. 10V			
14	D200	TZMB8V2-GS08		SOD-80	1	1	Zener diode	Vishay	TZMB8V2-GS08	
15	IC100	STM32F401RET6		LQFP-64	1	1	ARM Microcontroller Cortex M4	STMicroelectronics	STM32F401RET6	
16	IC200	KF33BDT-TR		DPAK	1	1	LDO	STMicroelectronics	KF33BDT-TR	
17	IC201	KF50BDT-TR		DPAK	1	1	LDO	STMicroelectronics	KF50BDT-TR	
18	IC300	CLRC66303HN		HVQFN32	1	1	Transceiver IC	NXP	CLRC66303HN	
19	IC400	MAX3311EUB+		UMAX-10	1	1	RS232	Maxim Integrated	MAX3311EUB+	
20	L100	0R		0603	1	1	Jumper			
21	L200	7427511			1	1	Ferrit Bead	Würth	7427511	
22	L205	744225S					current compensated choke	Würth	744225S	
23	L1, L2	2x0R 1206		1206	2	1	Jumper			
24	L3, L4, L5, L6	0R		1206	4	1	Jumper			
25	L7, L8, L9	742792122			3	1	Ferrit Bead	Würth	742792122	
26	L300	22n		0805	1	1	Inductor	Bourns	CW201212-22NJ	
27	L301	330n	2%	0805	1	1	Inductor	Coilcraft	0805CS-331XGRC	
28	R1, R4, R11, R16, R112	0R		0402	5	1	Jumper			

[illegible]

List of changes

Revision	Changes	Date of change	Editor
001	Initial version	07.09.2023	Waitzinger
002	Footprint change R24 to 0603	09.10.2023	Waitzinger
	C1 replaced with C108		
003	L301 changed	07.11.2023	Waitzinger
	IC100 programming instruction added		
004	New hardware revision	30.01.2024	Waitzinger
005	translated into english	23.05.2024	Waitzinger
006	translated into english	27.05.2024	Waitzinger
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