

Case name	Shihlin SDE on chip packaging machine				
Department	FA engineer group	date	2017-8-18	Page	2
Product	SDE series		code	ANS00002	

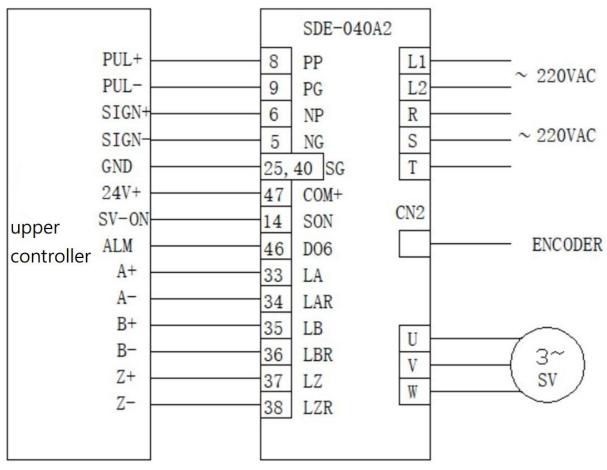
1. Introduction

The chip packaging machine is a high-tech product integrating electromechanical integration. Automation operations in the packaging machinery industry are changing the way in which packaging processes operate and the processing methods for packaging containers and materials. The packaging system that realizes automatic control can greatly improve the production efficiency and product quality, significantly eliminate the errors caused by the packaging process and printing labeling, effectively reduce the labor intensity of employees and reduce the consumption of energy and resources.



FA engineering

- 2. System control instructions
 - Requires high operating speed and repeatable positioning accuracy, stable operation on large inertia devices.
 - The drive must have high and low frequency resonance suppression to prevent positional deviation when the three axes are in high speed.
 - > Requires the drive to have excellent auto-tuning.
 - > Requires stability of the rotating shaft.
- 3. SDE series servo drive features
 - > 22-bit high resolution encoder for high precision positioning.
 - Speed response bandwidth 1.2kHz, the minimum settling time is only 1ms.
 - > Excellent Auto-tuning function, accurately complete in only 1 cycle.
 - Excellent resonance suppression function, which can quickly and effectively suppress the vibration or noise of the mechanism.
 - Standard Modbus communication protocol facilitates upper controller communication connection.
 - > Complete servo tuning software for on-site engineers.
 - > High flexibility internal position mode to reduce equipment costs.
- 4. Wiring



5. Parameters

X axis

R axis

parameter	abbr	set value	default value	unit	parameter	abbr
PA-02	ATUM	00000000	0000002	1	PA-02	ATUM
PA-03	ATUL	16	10	1	PA-03	ATUL
PA-13	PLSS	00000111	00000000	1	PA-13	PLSS
PA-28	ABS	00000001	00000000	/		
PA-32	APP	47764	0	pulse	PA-28	ABS
PA-44	EGM	00000001	00000000	1	PA-32	APP
PA-45	FBP	4000	10000	pulse	PA-44	EGM
PB-03	NLP	7	10	0.1ms	PA-45	FBP
PB-06	GD1	76	70	0.1 times	PB-03	NLP
PB-07	PG1	93	45	rad/s	PB-06	GD1
PB-08	VG1	374	183	rad/s	PB-07	PG1
PB-09	VIC	16	34	ms	PB-08	VG1
PB-27	ANCF	00000000	00000001	1	PB-09	VIC
PC-37	DTA9	1000	0	ms	PB-27	ANCF
PF-82	PRCM	10000	0	1	PC-37	DTA9

set value default unit 00000001 3978291 pulse 4000 7 10000 pulse 0.1ms 0.1 times rad/s rad/s 00000000 5000 ms / ms

Y axis

parameter	abbr	set value	default	unit
PA-02	ATUM	00000000	00000002	1
PA-03	ATUL	8	10	/
PA-13	PLSS	00000101	00000000	/
PA-28	ABS	00000001	00000000	/
PA-32	APP	2799815	0	pulse
PA-33	APR	-10	0	rev
PA-44	EGM	00000001	00000000	1
PA-45	FBP	4000	10000	pulse
PB-03	NLP	12	10	0.1ms
PB-04	PST	0	3	ms
PB-06	GD1	145	70	0.1 times
PB-07	PG1	36	45	rad/s
PB-08	VG1	144	183	rad/s
PB-09	VIC	43	34	ms
PB-27	ANCF	00000000	0000001	/
PB-44	PPD	100	0	1
PC-37	DTA9	1000	0	ms

Z axis

parameter	abbr	set value	default	unit
PA-01	STY	00000100	00001000	/
PA-02	ATUM	00000000	00000002	/
PA-03	ATUL	16	10	/
PA-13	PLSS	00000101	00000000	/
PA-28	ABS	00000001	00000000	/
PA-32	APP	1857888	0	pulse
PA-33	APR	-6	0	rev
PA-44	EGM	00000001	00000000	/
PA-45	FBP	4000	10000	pulse
PB-03	NLP	7	10	0.1ms
PB-06	GD1	69	70	0.1 times
PB-07	PG1	93	45	rad/s
PB-08	VG1	232	183	rad/s
PB-09	VIC	16	34	ms
PB-27	ANCF	00000000	0000001	/
PC-16	MBR	-100	100	ms
PC-37	DTA9	1000	0	ms
PD-10	DO1	00000006	0000003	/