

# For Network Products, Servers and Storage Applications

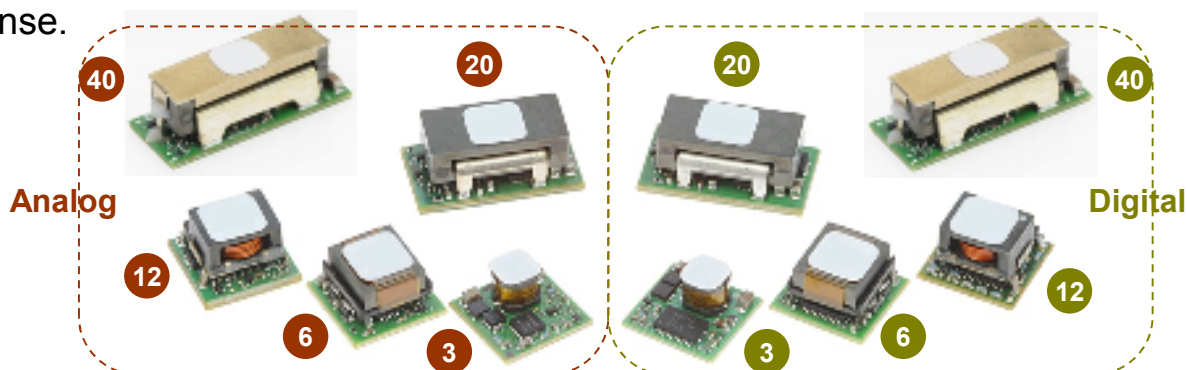
**NEW !**



## Non Isolated DC/DC Converters with the Latest Technologies

**Tomodachi Series**

*Tomodachi* series are the best selection for network products, servers and storage applications which needs low voltage, high current and fast transient response.



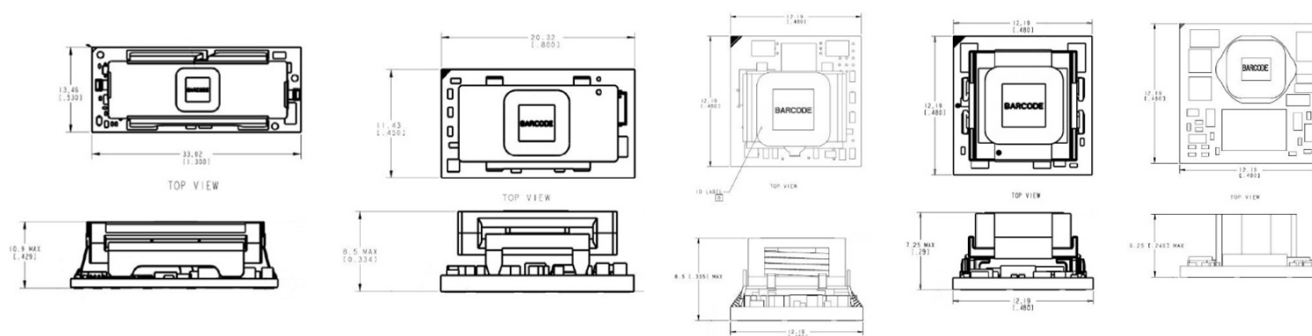
### Features

- ✓ 40, 20, 12, 6 & 3A modules
- ✓ Very small foot print SMD packages
- ✓ Equipped **PMBus™** communication and **Tunable Loop™** technology
- ✓ Programmable tightly regulated output voltage
- ✓ Fixed switching frequency with external synchronization
- ✓ Power Good signal output
- ✓ Remote ON/OFF
- ✓ Over current protection
- ✓ Over temperature protection



### Outline Dimension

	40A	20A	12A	6A	3A
W x L (mm)	33.0x13.5	20.3x11.4	12.2x12.2	12.2x12.2	12.2x12.2
H (mm)	10.9	8.5	8.5	7.25	6.25



## Specification

Item	40A	20A	12A	6A	3A
<b>Common Spec</b>					
Input Voltage Range	4.5 – 14.4V	3.0 – 14.4V	3.0 – 14.4V	3.0 – 14.4V	3.0 – 14.4V
Output Current	40A Max	20A Max	12A Max	6A Max	3A Max
Output Deviation	+/-3%	+/-3%	+/-3%	+/-3%	+/-3%
Ripple & Noise	50mVp-p typ	50mVp-p typ	50mVp-p typ	50mVp-p typ	50mVp-p typ
Operating Temp	-40 – 85degC	-40 – 85degC	-40 – 85degC	-40 – 85degC	-40 – 85degC
Storage Temp	-55 – 125degC	-55 – 125degC	-55 – 125degC	-55 – 125degC	-55 – 125degC
<b>Digital Products</b>					
Output Voltage Range	0.45 – 2.0V	0.45 – 5.5V	0.45 – 5.5V	0.45 – 5.5V	0.45 – 5.5V
Efficiency	91.5%	96.0%	96.0%	94.0%	94.0%
Switching Freq	400kHz	500kHz	600kHz	600kHz	600kHz
Synchronization	350 – 480kHz	425 – 600kHz	510 – 720kHz	510 – 720kHz	510 – 720kHz
<b>Analog Products</b>					
Output Voltage Range	0.6 – 2.0V	0.6 – 5.5V	0.6 – 5.5V	0.6 – 5.5V	0.6 – 5.5V
Efficiency	91.5%	96.0%	95.0%	94.0%	92.0%
Switching Freq	400 kHz	500kHz	600kHz	600kHz	600kHz
Synchronization	350 – 480kHz	425 – 600kHz	N/A	N/A	N/A

## Technology



### PMBus™

Supports a wide range of commands to both control and monitor the module with a full range of protections and warnings, digital on/off, trim, margin, power good, rise time adjustment, and input under voltage lockout.

### Tunable Loop™

Allows the user to optimize the dynamic response of the converter to match the load with reduced amount of output capacitance In order to optimize dynamic output voltage response.

## Lineup & Ordering Information

Output Current	Part No. & Sample			
	Digital	Sample	Analog	Sample
40A	FGLD12SR6040NA	Now	FGLS12SR6040NA	Now
20A	FGMD12SR6020NA	Now	FGMS12SR6020NA	Now
12A	FGSD12SR6012NA	Now	FGSR12SR6012NA	Now
6A	FGSD12SR6006NA	Now	FGSR12SR6006NA	Aug 2013
3A	FGSD12SR6003NA	Now	FGSR12SR6003NA	Aug 2013

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