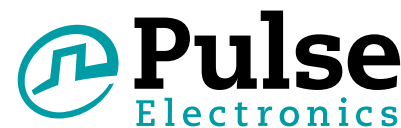


10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Military / Aerospace Grade



- Compliant with IEEE 802.ab for 1000Base-T
- 350μH OCL with 8mA bias at extended temperatures
- Operating and storage temperature:
1000B-5001F/5002F/5003F: -40°C to +85°C
1000B-5001FX/5002FX/5003FX: -55°C to +125°C
- IC grade transfer-molded package withstands 235°C peak temperature profile RoHS version withstands 245°C
- MSL: 3**

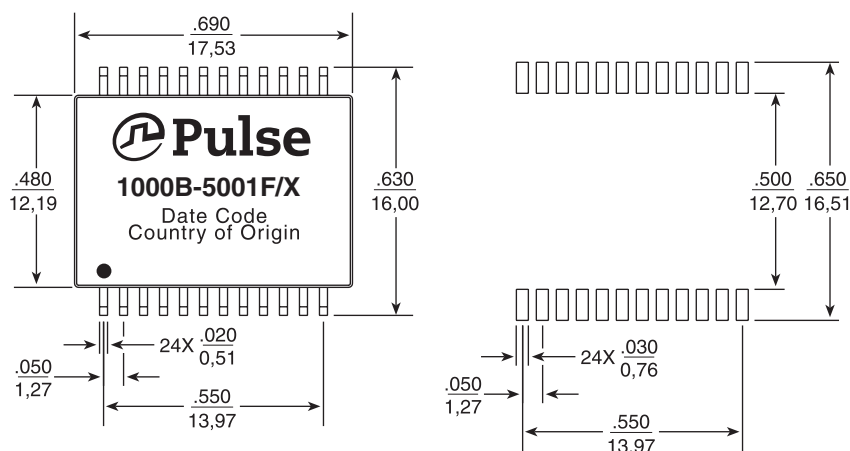
Electrical Specifications @ 25°C

Part Number ²	Insertion Loss (dB Min)	Return Loss (dB Max)				Crosstalk (dB Max)			CM to CM Rejection Ratio (dB Max)			DM to CM Rejection Ratio (dB Max)		
	0.1-100 Mhz	30 Mhz	60 Mhz	80 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz	30 Mhz	60 Mhz	100 Mhz
1000B-5001F	-1.20	-18	-12	-10	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5001FX	-1.40	-18	-12	-10	-8	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5002F	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5002FX	-1.20	-18	-14	-12	-10	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5003F	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33
1000B-5003FX	-1.20	-18	-14	-11	-9	-43	-37	-33	-40	-35	-30	-43	-37	-33

Note: 1. Add suffix NL for RoHS compliant part; i.e. 1000B-5001F becomes 1000B-5001FNL. **2.** For Tape and Reel Packaging, add "T" suffix at the end of the part number; i.e. 1000B-5001FXT.

Mechanical

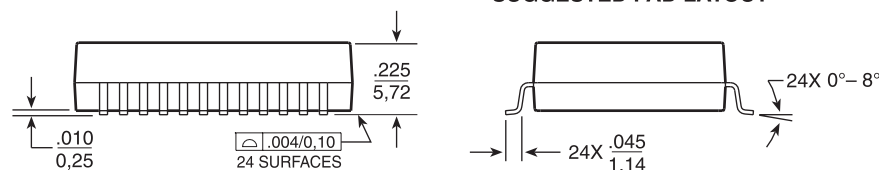
1000B-5001F/X



Weight3.0 grams
Tape and Reel 300/reel
Tube25/tube

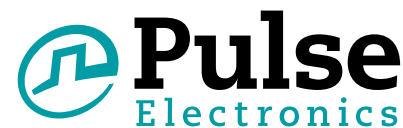
Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0.25}$

SUGGESTED PAD LAYOUT

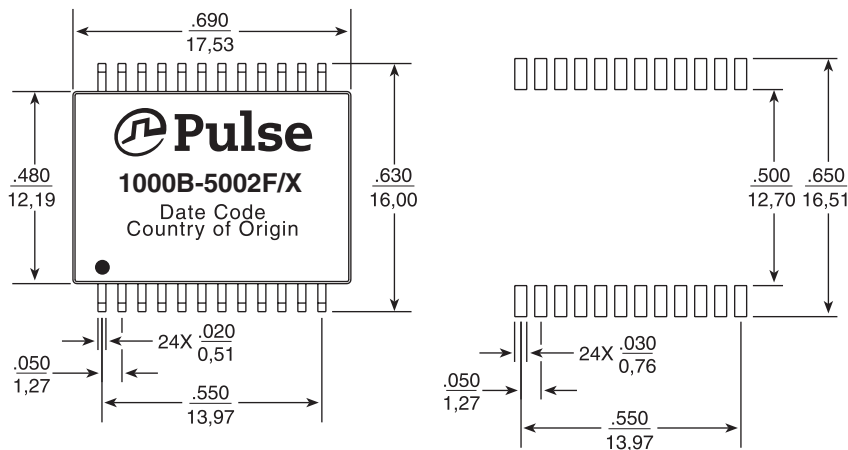


10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Military / Aerospace Grade



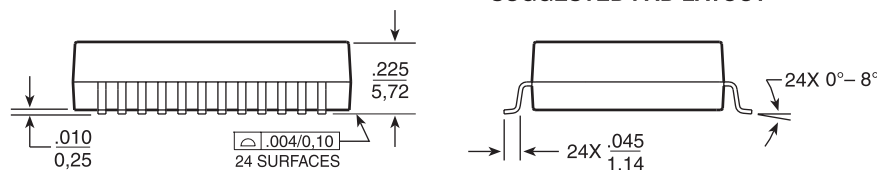
1000B-5002F/X



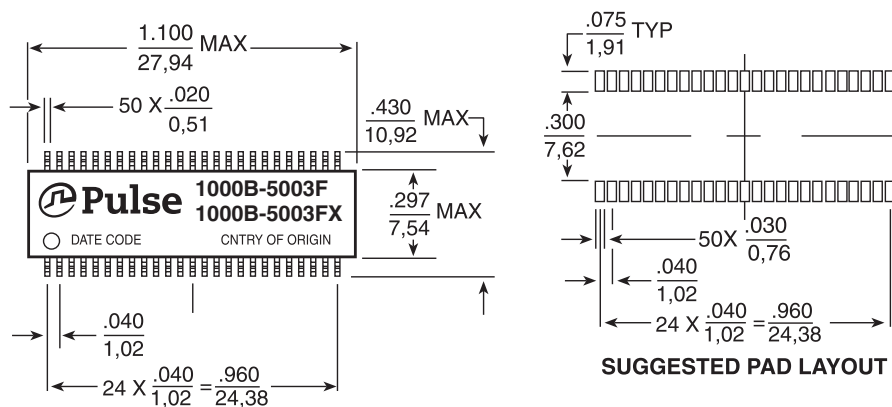
Weight 2.6 grams
Tape and Reel 300/reel
Tube25/tube

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0,25}$

SUGGESTED PAD LAYOUT



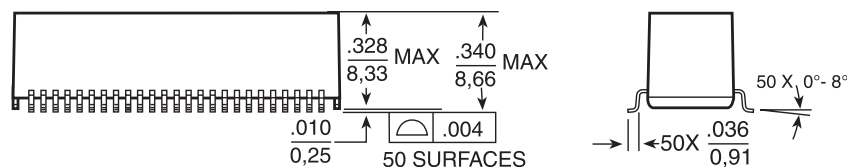
1000B-5003F/X



Weight 3.5 grams
Tape and Reel 250/reel
Tube15/tube

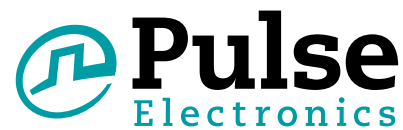
Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0,25}$

SUGGESTED PAD LAYOUT



10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

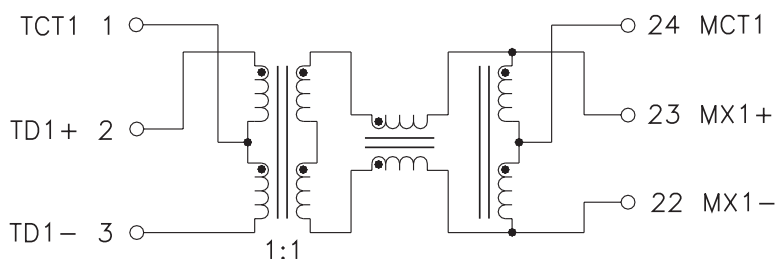
Military / Aerospace Grade



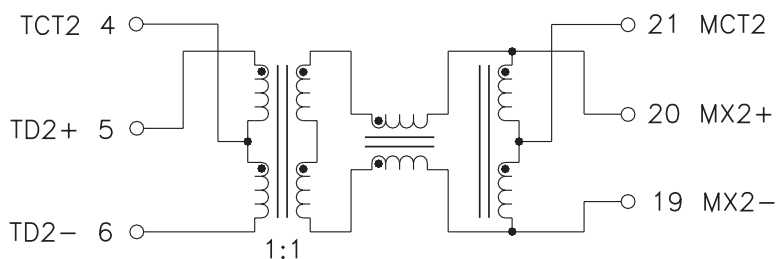
Electrical Schematic

1000B-5001F/X

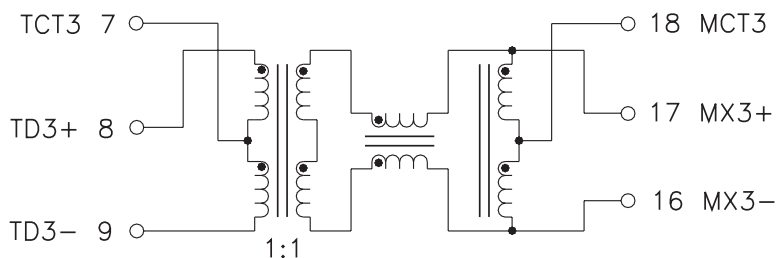
CHANNEL 1



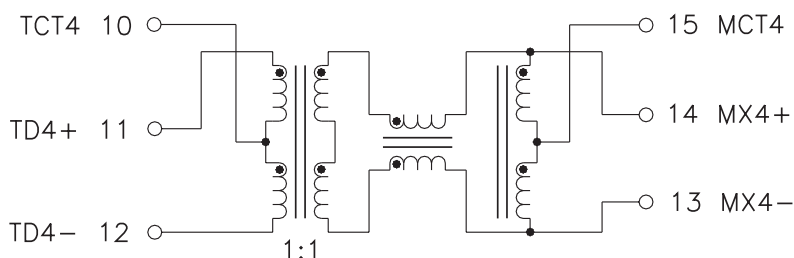
CHANNEL 2



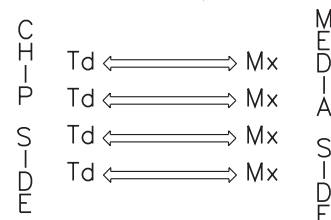
CHANNEL 3



CHANNEL 4



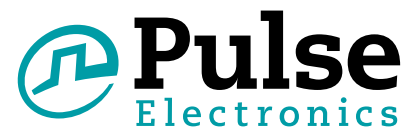
LEGEND



ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

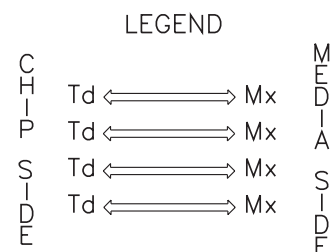
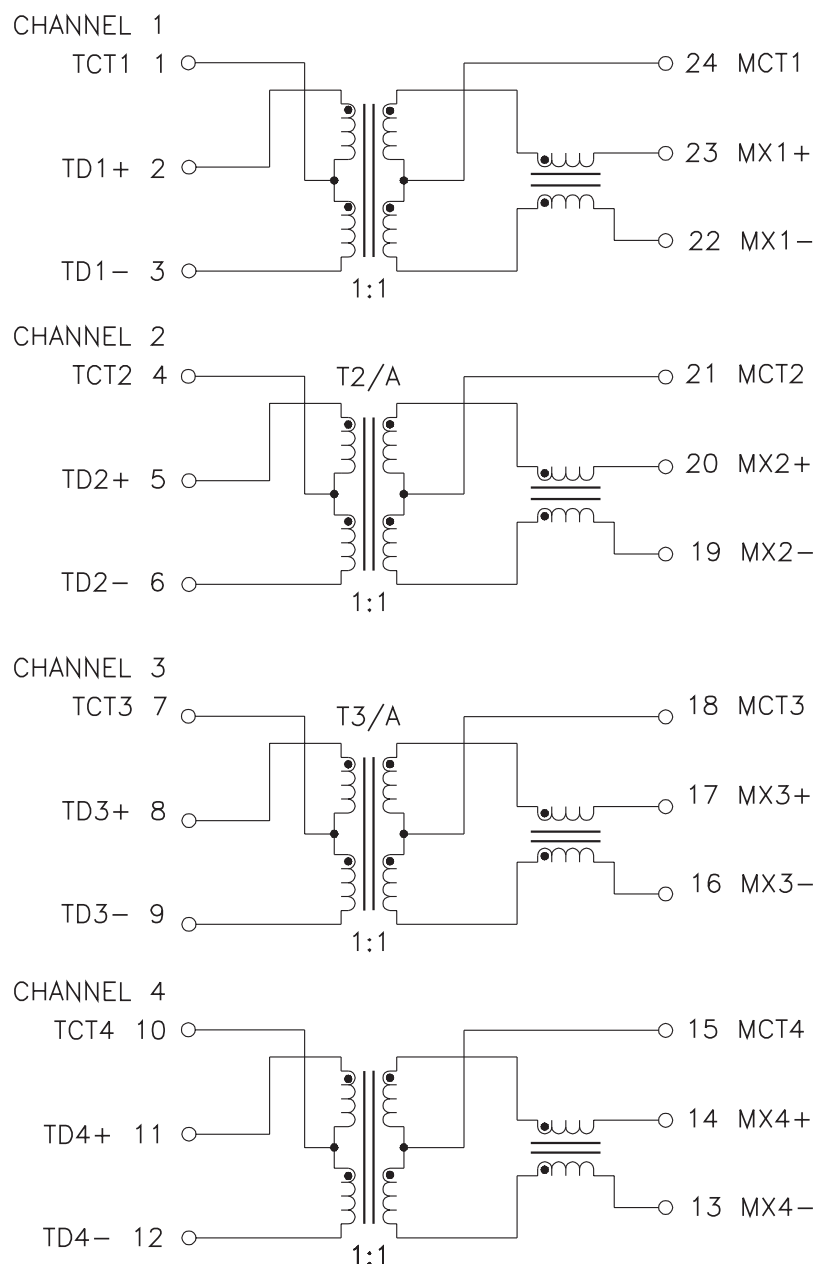
10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Military / Aerospace Grade



Electrical Schematic

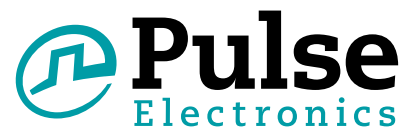
1000B-5002F/X



ALL CHANNELS ARE
IN PHASE BETWEEN
INPUT AND OUTPUT

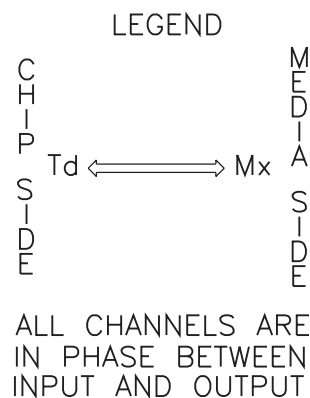
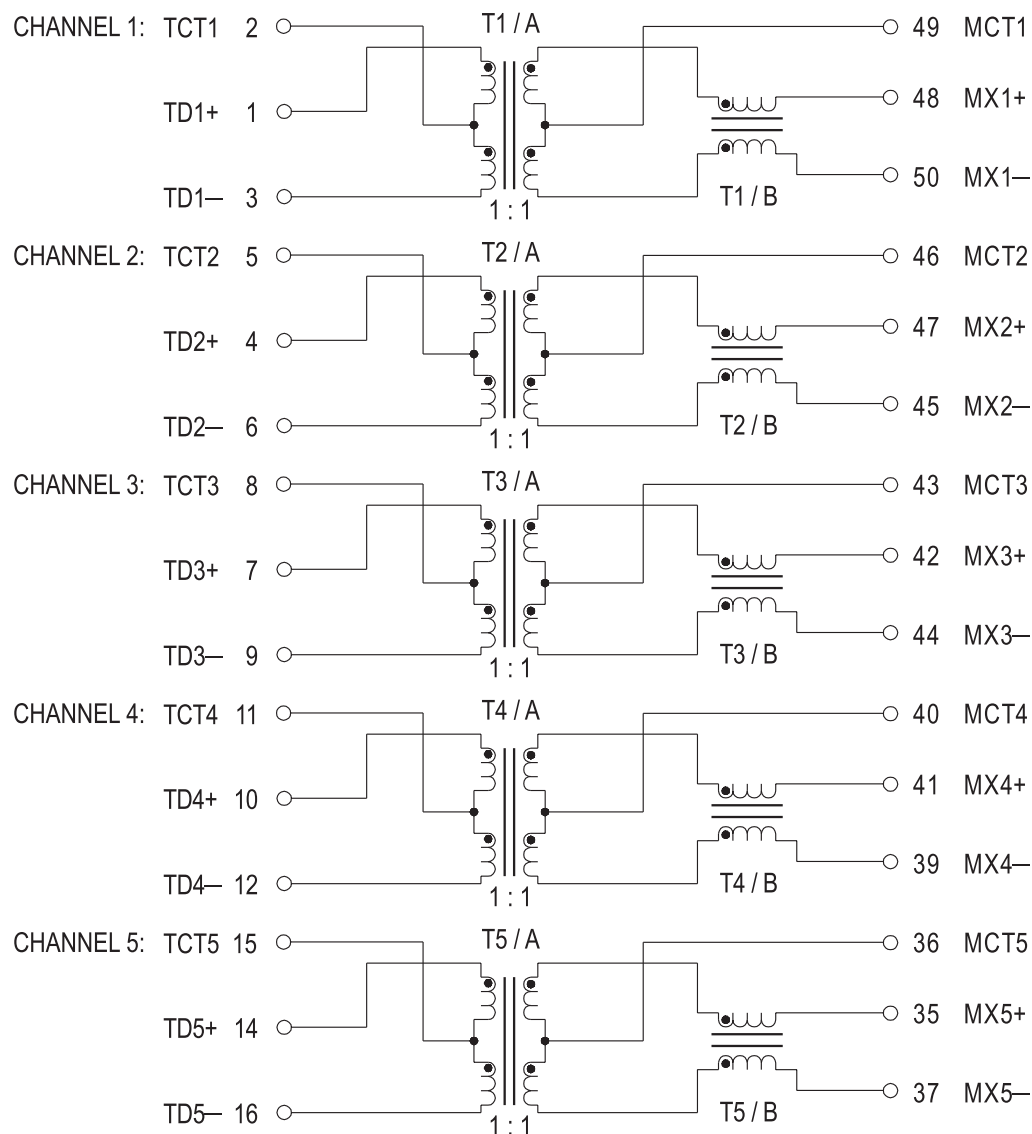
10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Military / Aerospace Grade



Electrical Schematic

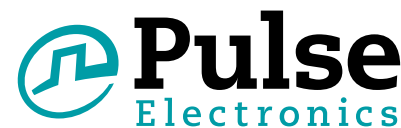
1000B-5003F/X



Continued on next page.

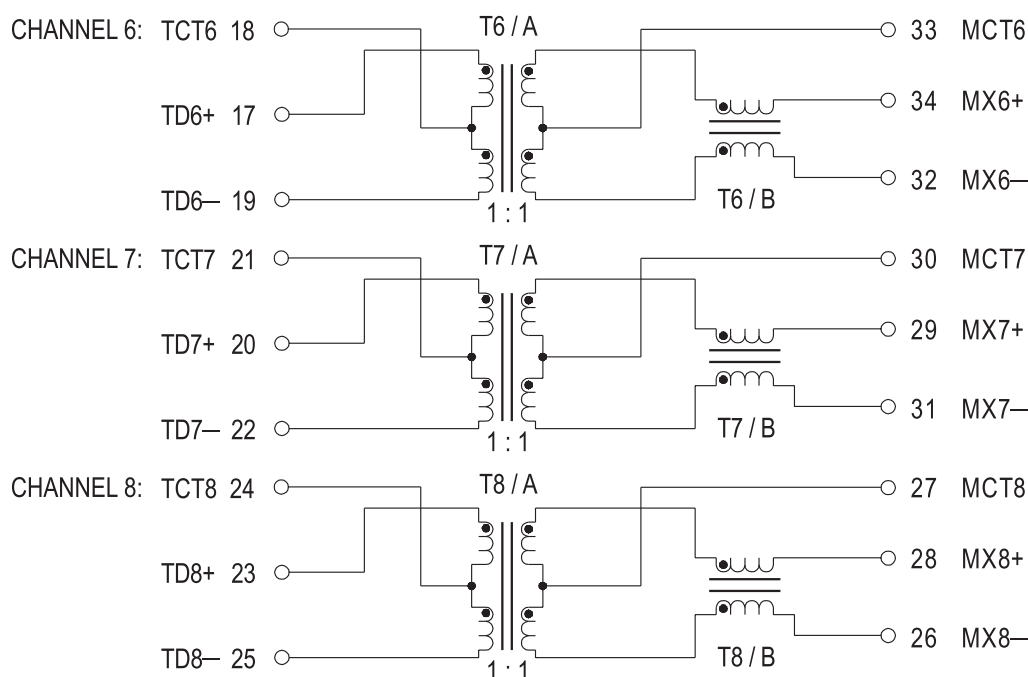
10/100/1000BASE-T SINGLE & DUAL-PORT TRANSFORMER MODULES

Military / Aerospace Grade



Electrical Schematic

1000B-5003F/X (cont.)



LEGEND

CH
P
S
I
D
E

Td $\longleftrightarrow$ Mx

ME
D
I
A
S
I
D
E

ALL CHANNELS ARE IN PHASE BETWEEN INPUT AND OUTPUT

For More Information

Pulse Worldwide Headquarters

Two Pearl Buck Court
Bristol, PA 19007
U.S.A.

Tel: 215 781 6400
Fax: 215 781 6403

Pulse Europe

Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806 0
Fax: 49 7032 7806 135

Pulse China Headquarters

B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejinan Road
High-Tech Zone
Nanshan District
Shenzhen, PR China 518057

Tel: 86 755 33966678
Fax: 86 755 33966700

Pulse North China

Room 2704/2705
Super Ocean Finance Ctr.
2067 Yan An Road West
Shanghai 200336
China

Tel: 86 21 62787060
Fax: 86 2162786973

Pulse South Asia

135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia

3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.

Tel: 886 3 4356768
Fax: 886 3 4356823 (Pulse)
Fax: 886 3 4356820 (FRE)

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