

High-speed Transmission
0.5 mm Pitch Floating Connector

DT SERIES

High stack type



Stand tall. Move well.

DT SERIES

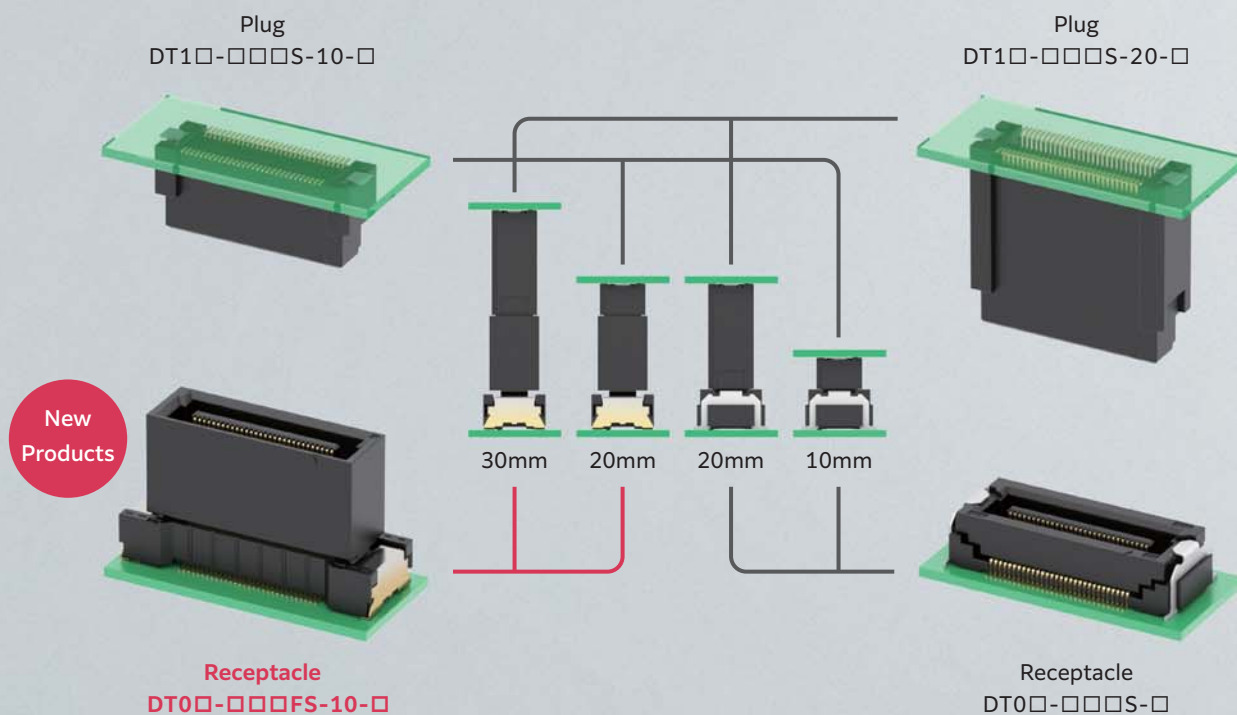
High stack type

High-speed Transmission 0.5 mm Pitch Floating Connector

Features

1

Stacked height available up to 30mm



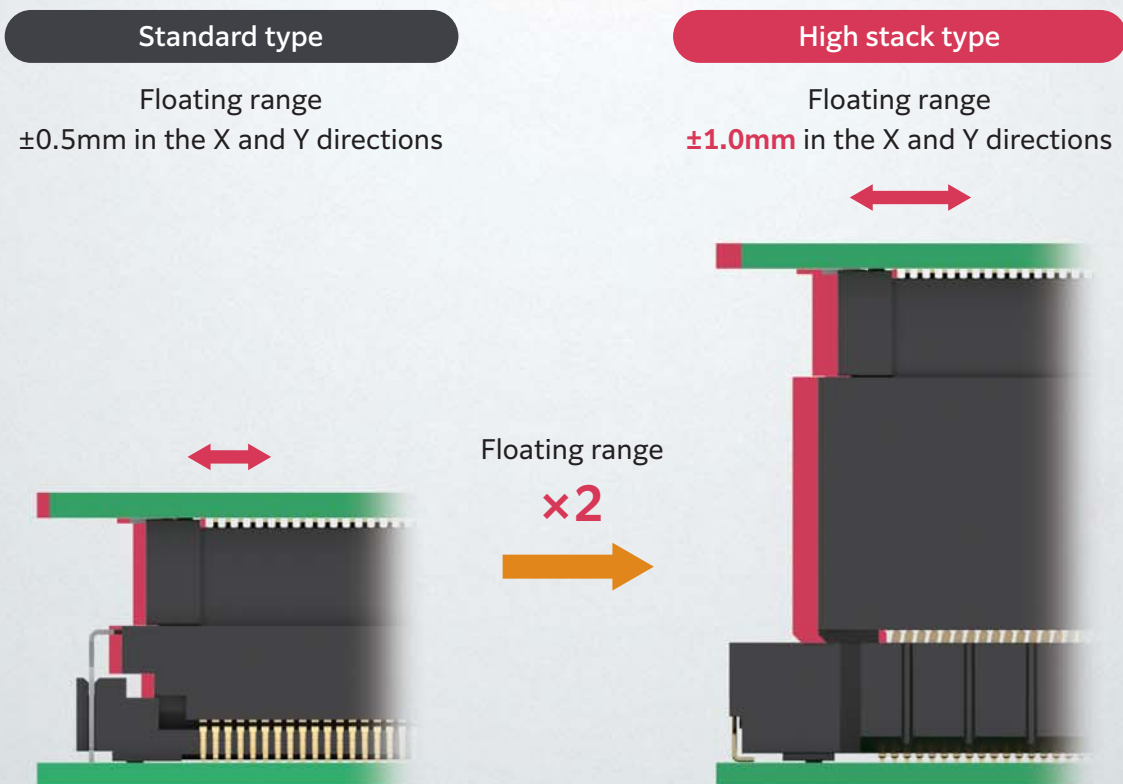
Product table for stack type

Stacked height	Part number		Floating amount	Number of contacts								
	Receptacle	Plug		30	40	60	80	100	120	140	160	240
8mm	DT0□-□□□S-T	DT1□-□□□S-8-T	±0.5mm	✓	—	—	—	✓	—	✓	—	—
10mm		DT1□-□□□S-10-T		✓	✓	✓	✓	✓	—	✓	✓	✓
11mm		DT1□-□□□S-11-T		—	—	—	—	—	*	✓	*	—
15mm		DT1□-□□□S-15-T		✓	✓	✓	✓	✓	✓	✓	—	—
16mm		DT1□-□□□S-16-T		✓	—	✓	—	—	✓	—	*	—
17mm		DT1□-□□□S-17-T		✓	✓	✓	✓	✓	—	✓	—	—
18mm	DT0□-□□□S-T	DT1□-□□□S-18-T	±0.5mm	✓	✓	✓	✓	✓	—	✓	—	—
	DT0□-□□□FS-10-T	DT1□-□□□S-8-T	±1.0mm	✓	—	—	—	✓	—	✓	—	—
19mm	DT0□-□□□S-T	DT1□-□□□S-19-T	±0.5mm	✓	✓	✓	✓	✓	*	✓	—	—
20mm	DT0□-□□□S-T	DT1□-□□□S-20-T	±0.5mm	✓	✓	✓	✓	✓	*	✓	—	—
	DT0□-□□□FS-10-T	DT1□-□□□S-10-T	±1.0mm	✓	✓	✓	✓	✓	*	✓	—	—
21mm	DT0□-□□□FS-10-T	DT1□-□□□S-11-T	±1.0mm	—	—	—	—	—	*	✓	—	—
25mm	DT0□-□□□FS-10-T	DT1□-□□□S-15-T	±1.0mm	✓	✓	✓	✓	✓	✓	✓	—	—
26mm		DT1□-□□□S-16-T		✓	—	✓	—	—	✓	—	—	—
27mm		DT1□-□□□S-17-T		✓	✓	✓	✓	✓	—	✓	—	—
28mm		DT1□-□□□S-18-T		✓	✓	✓	✓	✓	—	✓	—	—
29mm		DT1□-□□□S-19-T		✓	✓	✓	✓	✓	—	✓	—	—
30mm		DT1□-□□□S-20-T		✓	✓	✓	✓	✓	*	✓	—	—

* Please contact KEL local representatives when this combination is required.

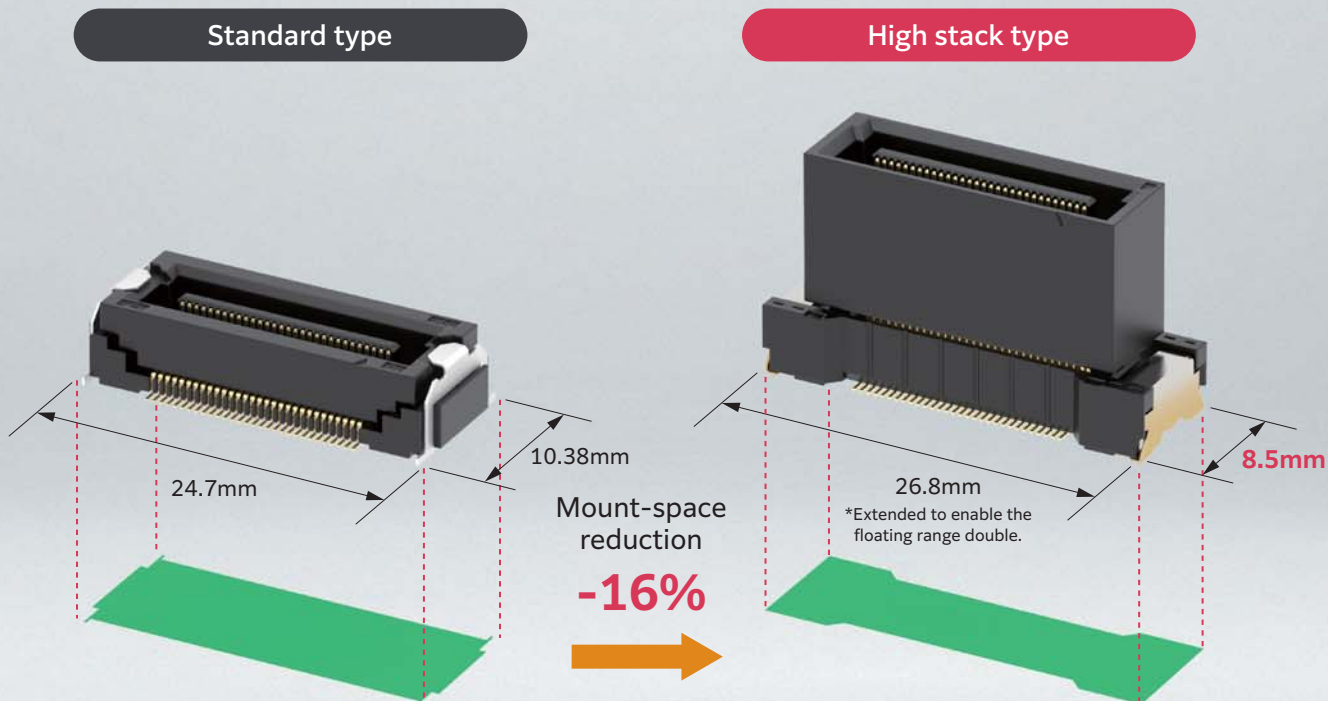
Features
2

Upgrade the floating range double; $\pm 1.0\text{mm}$ in the X and Y directions



Features
3

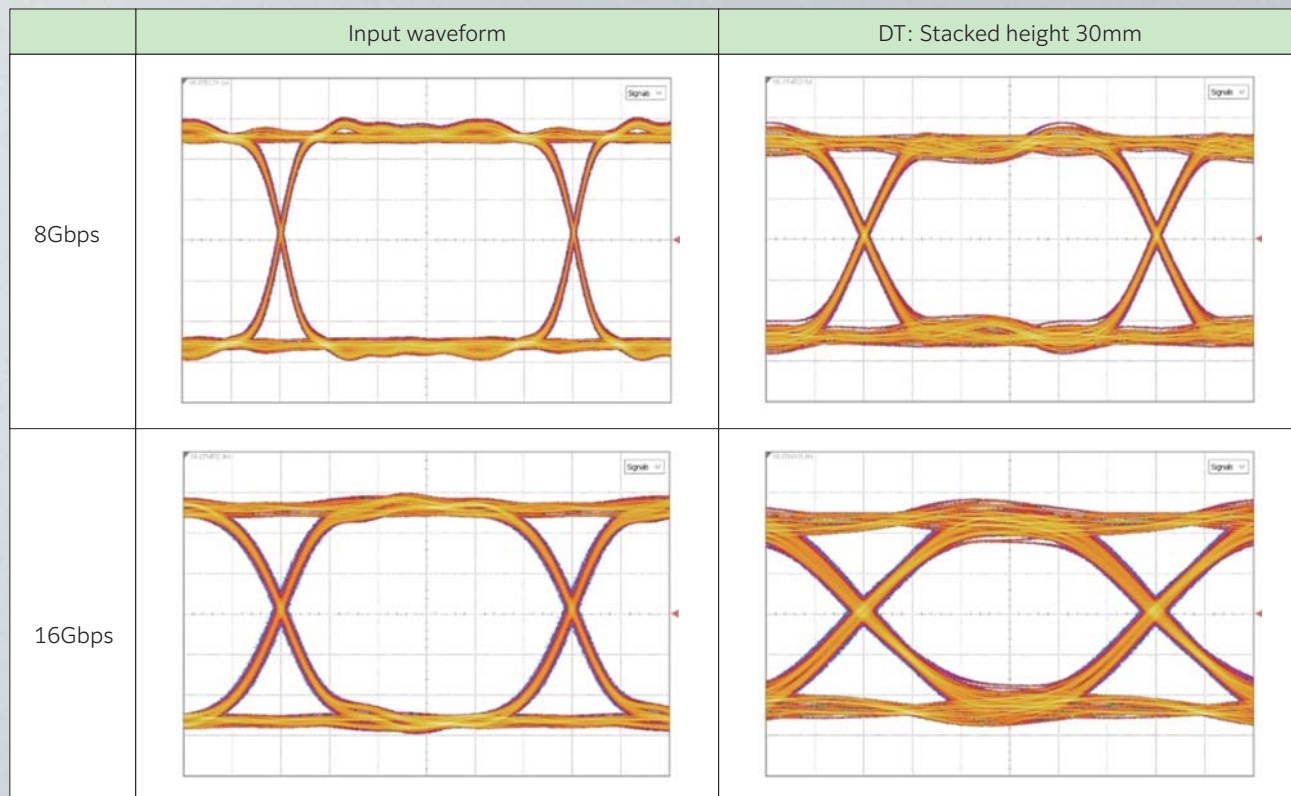
Offer space-saving on the PCB



*The dimensions are for 60pins.

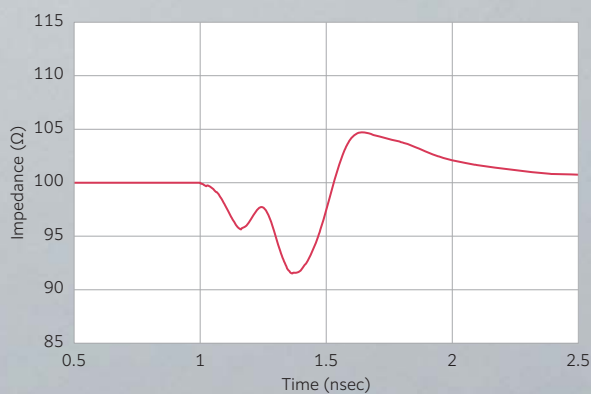
*when mating with DT0x high stack type.

Eye diagram

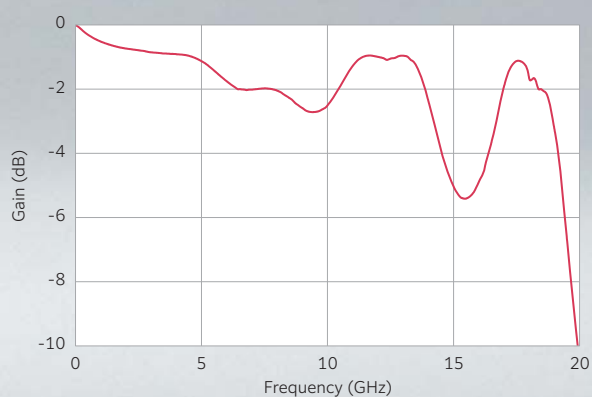


*The data is for reference only.

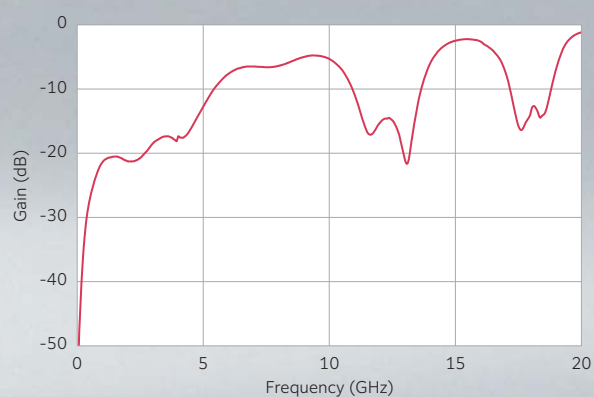
Differential Impedance (start at 100Ω / Tr=100psec, 20-80%)



Differential Mode Insertion Loss (start at 100Ω)



Differential Mode Return Loss (start at 100Ω)

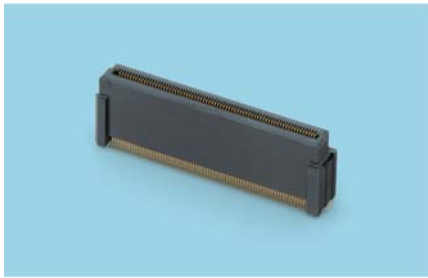


*The data is for reference only.

Product appearance



DT0□-□□□FS-10-T



DT1□-□□□S-□□-T

Order code

<div>DT0□-□□□FS-10-T</div> <div>①②③④⑤</div>	① Series name	(Receptacle) DT00 : Without positioning posts / DT01 : With positioning posts
	② Number of contacts	030 : 30pin / 040 : 40pin / 060 : 60pin / 080 : 80pin 100 : 100pin / 120 : 120pin / 140 : 140pin
	③ Contact tail style	FS : Flexible straight
	④ Stacked height	10 : Height up of 10mm
	⑤ Anti-dust tape	T : With anti-dust tape
<div>DT1□-□□□S-□□-T</div> <div>①②③④⑤</div>	① Series name	(Plug) DT10 : Without positioning posts / DT11 : With positioning posts
	② Number of contacts	030 : 30pin / 040 : 40pin / 060 : 60pin / 080 : 80pin 100 : 100pin / 120 : 120pin / 140 : 140pin
	③ Contact tail style	S : Straight
	④ Stacked height *	8 : 18mm / 10 : 20mm / 11 : 21mm / 15 : 25mm 16 : 26mm / 17 : 27mm / 18 : 28mm / 19 : 29mm / 20 : 30mm
	⑤ Anti-dust tape	T : With anti-dust tape

*Please see "Ordering Information" for available combinations.

Specifications



Material and plating		Electrical characteristics	
Insulator material	Glass-filled LCP (UL94V-0), Black	Current rating	0.5A per contact
Contact material	Copper alloy	Contact resistance	80mΩ max.
Contact plating	Gold over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Retention clip material	Copper alloy	Insulation resistance	100MΩ min. at 250V DC
Retention clip plating	(Receptacle) Gold over Nickel, Gold plate finish (on tail) (Plug) Tin over Nickel	Operating temperature	-40°C to +105°C
Anti-dust tape material	Polyimide		

Mating matrix

Order code		Receptacle			
		DT0□-□□□S-□□-T (Straight / Standard type)	DT0□-□□□FS-10-□ (Straight / Height up of 10mm type)	DT0□S-□□□S-T (Straight / With shell type)	DT0□-□□□L-□□ (Right angle / Standard type)
Plug	DT1□-□□□S-□□-□□-T (Straight / Standard type)	Stacked mating (Stacked height : 8 to 20mm) *1	Stacked mating (Stacked height : 18 to 30mm) *1	*2	*2
	DT1□S-□□□S-10-T (Straight / With shell type)	*2	*2	Stacked mating (Stacked height : 10mm)	—
	DT1□-□□□L-□□ (Right angle / Standard type)	Vertical mating	Vertical mating	—	Horizontal mating

*1 Please see "Ordering Information" for available combinations.
*2 Please contact KEL local representatives when this combination is required.

Product line up

	DT-E / DT-E-FS	DT / DT-FS	DT12/13	DT-S	DY / DY03/04	DUS	DU	DW
Series name								
Pitch	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.5 mm	0.4 mm	0.4 mm	0.635 mm
Floating amount (XY direction)	DT-E: ±0.7 mm DT-E-FS: ±1.2 mm	DT: ±0.5 mm DT-FS: ±1.0 mm	±1.0 mm *2	±0.5 mm	±0.5 mm	±0.4 mm	±0.4 mm	±0.7 mm
Number of contacts	30 to 140	30 to 240	60	30, 40, 100	30 to 140	40 to 200	80 to 200	40 to 60
Options	7	9	1	3	8	8	5	3
Connection type	Stacking	✓ 8 to 30 mm	✓ 18 mm	✓ 10 mm	✓ 5 to 14 mm	✓ 3 mm	✓ 5, 7 mm	✓ 6.3, 10, 15 mm
	Vertical	—	—	✓	✓	—	✓	✓
	Horizontal	—	—	—	—	—	—	—
Rated current *1	Signal contacts: 0.4A/pin Power contacts: 6.0A/pin	DT: 0.4A/pin DT-FS: 0.5A/pin	0.4A/pin *2	0.4A/pin	S type: 0.4A/pin L type: 0.3A/pin	0.4A/pin	DU: 0.4A/pin DU12: 0.35A/pin	0.5A/pin
Operating temperature	-40 to +105°C	-40 to +105°C	-40 to +125°C	-40 to +105°C	DY: -40 to +85°C DY03/04: -40 to +105°C	-40 to +125°C	DU: -40 to +85°C DU12: -40 to +105°C	-40 to +105°C
Packaging	Reel	Reel, Tray	Reel	Reel	Reel, Tray	Reel	Reel	Reel

*1 It is possible to design a current capacity exceeding the standard rated current depending on pin count and mating type.
Please note that there is a limit to the number of pins that can be energized at the same time.

*2 When mated with DT0□-□□□FS-10-T on the receptacle side.

Manufactured in clean room

DY, DU and DT series are being manufactured by automated production lines in class 100,000 clean room.



Automated production in clean room

KEL Company Profile

Trade Name : KEL CORPORATION

Established : July 23, 1962

Total Capital : 1,617 Million Yen

President : Akira Kasuga

Head Office : 6-17-7 Nagayama, Tama,

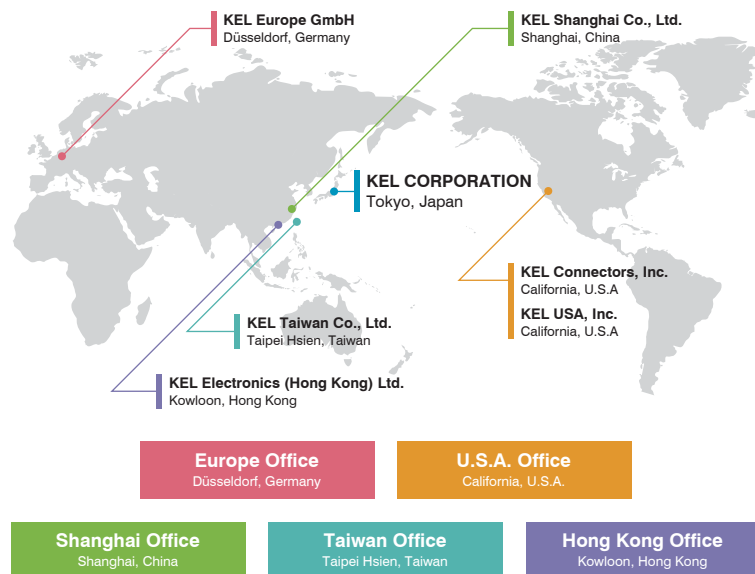
Address Tokyo 206-0025, Japan

URL : www.kel.jp

Factories

- Yamanashi Factory (Nishi-Yatsushiro, Yamanashi)
- Nagano Factory (Kita-Azumi, Nagano)
- Minami-Alps Factory (Minami-Alps, Yamanashi)

Global Network



www.kel.jp

KEL provides the products from a connector to a rack.

KEL CORPORATION

More Information
https://www.kel.jp/feature/dtfs_lp.html

