



Intelight Product Solutions

# Intelight Innovations



- Intelight, Inc. started Feb, 2006
- Core Group of Experienced ITS Engineers
- Offices in Tucson, Seattle, Phoenix, St. Louis, and Atlanta
- Local Distribution Network
- Part of the Q-Free Family = Resources

- Q-Free
  - ITS Company
  - Major Investor
  - Leadership and Growth
  - No Competing Products

## Intelligent Development

- Use Current and New Technology
  - 1<sup>st</sup> to Develop Exclusively on the ATC Platform
  - 1<sup>st</sup> Touch-Screen Controller
  - 1<sup>st</sup> Embedded Android Processing System for User Interface
  - 1<sup>st</sup> Embedded Web Server
  - 1<sup>st</sup> Fully Web-based Central System (Thin Client)
- Distributor and Customer Input
- Cost Efficient Migration Paths
- Expanded Hardware Platforms for Future Use

### Business Model

- Provide Qualified Technical and Sales Support
- Support the Open Standards
  - Drives Industry-Wide Innovation
  - Drives Customer Support
  - Reduces "Proprietary Nature" of our Industry
- Provide "Best in Class" Local and System Software

## Intelligent Development

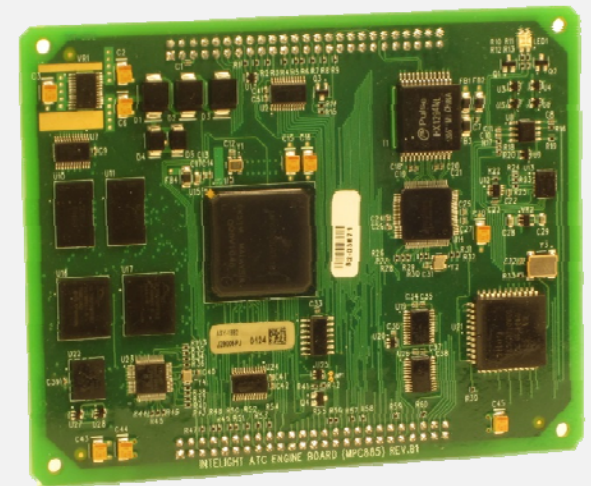


- ✓ Effective Support
- ✓ Innovative Solutions
- ✓ Customer Driven Develop.
- ✓ Adhere to Standards

- **MaxTime** = Local Intersection Software
- **MaxView** = Modern ATMS Platform
- **MaxAdapt** = Local Adaptive Solution
- **MaxTime Ramp Meter** = Advanced Ramp Meter
- **170 Emulator** = Run 170 Firmware on ATC
- **Custom ATC Solutions** = Parking Management, Weather Sensor and more

### ATC Controller Framework

- Embedded Linux Operating System
- Controller Framework Supports Future Expansion
- Similar Hardware (Same Engine Board)
- Open Hardware Platform
- Consistent User Experience
- Ideal for Multi-Agency Jurisdictions





# Intelight Product Solutions

## Advanced Transportation Controller

### ATC Controller

Linux Operating System with  
64 MB Ram | 64 MB Flash Memory and  
Power PC 885 133 MHz (200 MIPS) Processor



16 Line x 40 Character  
Front Panel LCD (320x240 px)  
Optional Color Touch-Screen

Integrated Four-Port  
Ethernet Switch  
(1C Carrier)



2070-3D Front Panel



C50 Serial Port  
Front Facing Ethernet Port

3x USB 2.0 Ports



# Intelight Product Solutions

## Advanced Transportation Controller

### ATC Controller



2070-CBX

NEMA X-1L



## **Intelight ATC Controller**

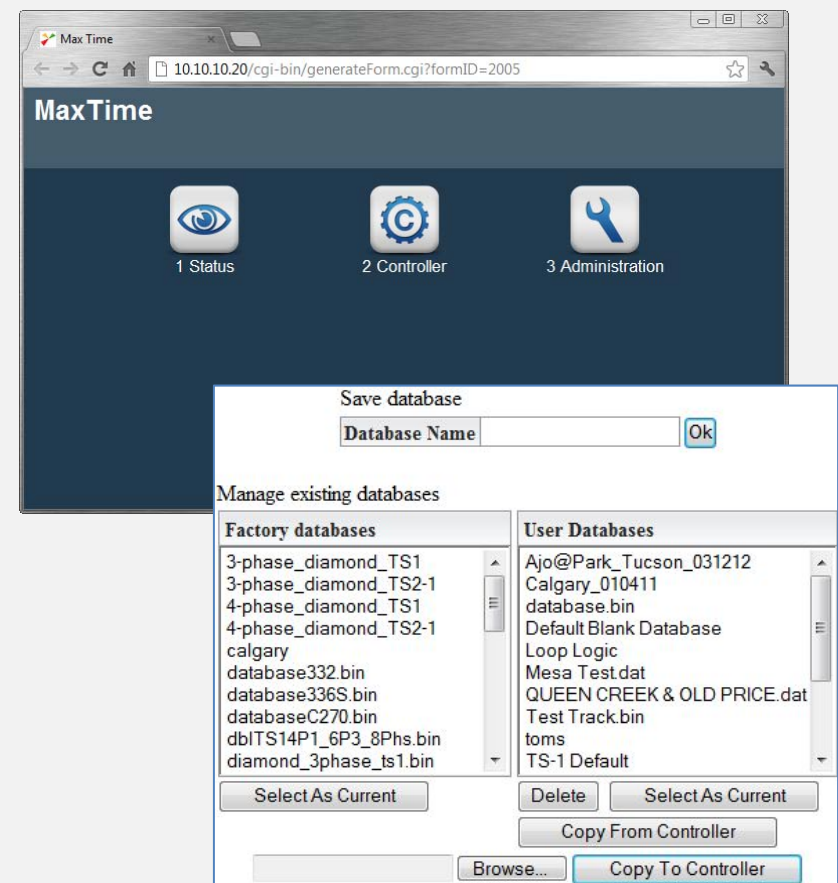
- Advance Transportation Controller (ATC)
- Compliant with ATC 5.2b (and 6.2 Proposed) Standard
- Open Architecture Embedded Linux Platform
- Multi-Processing Operating System
- ATC Standard API for Third Party Application Support  
(Intelight, ATC Committee)

## MaxTime Local Control Software

- Based on NTCIP and ATC Standards
- Open Source / Open MIB
- Built on Intelight's Local Controller Framework
- Web-Server / REST Interface
- Simple, Intuitive Design
- All Inclusive
- Supports 33x, 34x (ITS), TS-1, TS-2 Cabinets
- Linux and Windows Versions

# MaxTime – Advanced Platform

- Linux 3.0 Operating System
- Open Architecture
- Multiprocessing O/S
- Seamless Mobile access
- Intuitive Menu Structure
- Advanced Logic Processor
- Peer to Peer over Ethernet
- Closed Loop Built In



# MaxTime Operational Parameters

- 40 Phases
- 16 Rings
- 20 Unique Sequences
- 32 Overlaps
- 72 Detectors
- 128 TOD Patterns

## Phase Parameters

[illegible]

### Sequence Data

Sequence: 20 ▼

Ring	Sequence Data
1	1,2,a,3,4,b
2	5,6,a,7,8,b
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	

Main Control						Coordination				Free	Flash
Control Source	Select Mode	Active Mode	Day Plan	Timebase	Action	Local Cycle	Master Cycle	Current State	Current State		
manual	Free	Free	1	2		0	0	Command Free	notFlash		

[Next](#)

Phase Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Reds	●	●	●	●	●	●	●								
Yellows															
Greens				●							●				
Veh Calls	→	→	→	→	→	→	→	→							
Veh Calls															
Ext Calls															
Ped Calls	↖	↖	↖	↖	↖	↖	↖	↖							
Ped Call															
Alt Ped Calls															
Don't Walk	⬇	⬇	⬇	⬇	⬇	⬇	⬇	⬇							
Ped Clear															
Walks				⬆	⬆	⬆	⬆	⬆							

## Unique Functionality

- Web User Interface
- Intelligent Transition Algorithm and "Coord Now"
- USB Support (Upgrades/Databases)
- Database Management
- Logic Processor / Peer to Peer
- Feature Philosophy
- Update Software without Restart

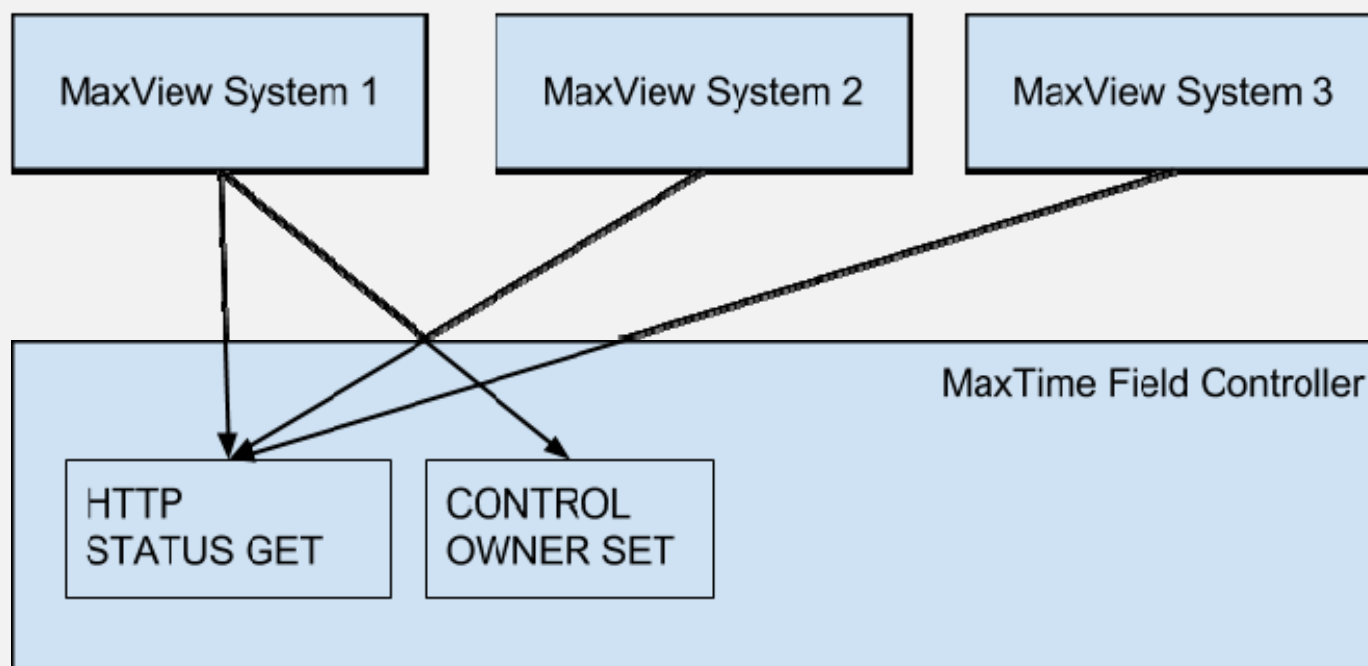


## MaxView Central Software

- Traffic Signal Central Management System
- All Inclusive Licensing Model
- Web-Based Platform (Microsoft IIS)
- Thin Client (Microsoft Silverlight)
- Supports NTCIP and open protocols
- Modern, Light on Resources
- 3<sup>rd</sup> Party Controllers Integrated Free of Charge



### MaxView C2C Scenarios



## Major Projects

- Georgia DOT
- DFW Software Supply
- Santa Monica, CA
- Calgary, AB
- Tucson, AZ
- ADOT Southern Region
- Utah DOT System
- Oregon DOT
  - ATC Controller
  - Ramp Meter Software Supply
  - Custom ATC Software Solutions
- Peoria, AZ
- Anaheim, CA
- San Clemente, CA

## Georgia

- Sales/Training/Support
  - Mike Clance
  - Bobby McGraw
  - Tommy Anderson
- Controller Deployment
  - Arcadis
- FLEXIBLE SCHEDULE
- USER INVOLVEMENT
- DATA COLLECTION TOUR
- Customer Service
- Support
- Customer Service
- Support